

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT



APPLICATION FOR PERMIT TO DRILL						1. WELL NAME and NUMBER LC Tribal 7-18D-56					
2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						3. FIELD OR WILDCAT UNDESIGNATED					
4. TYPE OF WELL Oil Well Coalbed Methane Well: NO						5. UNIT or COMMUNITIZATION AGREEMENT NAME					
6. NAME OF OPERATOR BERRY PETROLEUM COMPANY						7. OPERATOR PHONE 303 999-4044					
8. ADDRESS OF OPERATOR 4000 South 4028 West Rt 2 Box 7735, Roosevelt, UT, 84066						9. OPERATOR E-MAIL kao@bry.com					
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) 2OG0005500			11. MINERAL OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>			12. SURFACE OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>					
13. NAME OF SURFACE OWNER (if box 12 = 'fee') DWR						14. SURFACE OWNER PHONE (if box 12 = 'fee')					
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')						16. SURFACE OWNER E-MAIL (if box 12 = 'fee')					
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN') Ute Indian Tribe			18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS YES <input checked="" type="checkbox"/> (Submit Commingling Application) NO <input type="checkbox"/>			19. SLANT VERTICAL <input type="checkbox"/> DIRECTIONAL <input checked="" type="checkbox"/> HORIZONTAL <input type="checkbox"/>					
20. LOCATION OF WELL		FOOTAGES		QTR-QTR	SECTION	TOWNSHIP		RANGE		MERIDIAN	
LOCATION AT SURFACE		855 FNL 2025 FWL		NENW	18	5.0 S		6.0 W		U	
Top of Uppermost Producing Zone		1293 FNL 2480 FEL		SWNE	18	5.0 S		6.0 W		U	
At Total Depth		1630 FNL 1950 FEL		SWNE	18	5.0 S		6.0 W		U	
21. COUNTY DUCHESENE			22. DISTANCE TO NEAREST LEASE LINE (Feet) 855			23. NUMBER OF ACRES IN DRILLING UNIT 640					
			25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completion) 2			26. PROPOSED DEPTH MD: 6678 TVD: 6451					
27. ELEVATION - GROUND LEVEL 7187			28. BOND NUMBER RLB0005647			29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE 43-12400					
Hole, Casing, and Cement Information											
String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight	
SURF	13.5	8.625	0 - 1390	32.0	J-55 ST&C	9.5	Type V	270	3.82	11.0	
							Class G	350	1.15	15.8	
PROD	7.875	5.5	0 - 6678	17.0	N-80 LT&C	9.5	Type V	200	3.82	11.0	
ATTACHMENTS											
VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES											
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER						<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN					
<input checked="" type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)						<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER					
<input checked="" type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)						<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP					
NAME Krista Mecham				TITLE Regulatory Permitting Tech				PHONE 435 722-1325			
SIGNATURE				DATE 04/23/2013				EMAIL kmm@bry.com			
API NUMBER ASSIGNED 43013521530000						APPROVAL					

Received: April 30, 2013

BERRY PETROLEUM COMPANY
LC Tribal 7-18D-56
Section 18, T5S, R6W, U.S.B.&M.
Surface: 855' FNL & 2025' FWL (NE/4NW/4)
BHL: 1630' FNL & 1950' FEL (SW/4NE/4)
Duchesne County, Utah

ONSHORE ORDER NO. 1

DRILLING PROGRAM

A,B Estimated Tops of Geological Markers and Formations Expected to Contain Water, Oil and Gas and Other Minerals

FORMATION	DRILL DEPTH * @ SHL (TVD)	DRILL DEPTH* @ BHL (TVD)	Measured Depth
Uinta Fm	Surface	Surface	Surface
Green River	758'	781'	758'
Green River Fouch Marker	1330'	1347'	1330'
Mahogany	1911'	1930'	1919'
Tgr3	2953'	2969'	3021'
*Douglas Creek	3723'	3741'	3843'
Black Shale	4388'	4395'	4553'
*Castle Peak	4656'	4672'	4839'
*Uteland Butte	5000'	5018'	5206'
*Wasatch	5233'	5251'	5455'
CR-6 (base U Wasatch)	6433'	6451'	6678'
TD	6433'	6451'	6678'
Base of Moderate Saline Water	6711'	6610'	

*PROSPECTIVE PAY

Berry is locating the well at the proposed surface location and directionally drilling to the proposed bottom hole location. By drilling directionally, Berry Petroleum Company will improve field development efficiency by potentially combining multiple surface hole locations together. This will significantly reduce total surface disturbance plus combine the use of access roads and existing pipelines.

Furthermore, Berry hereby certifies that it is the sole working interest owner with 460 feet of the entire directional well bore and the remainder of the Ute Tribal section.

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C Pressure Control Equipment : (Schematic Attached)

The BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc. A 3M system will be utilized. The attached diagram depicts the use of an annular in conjunction with double rams. However, an annular, double rams or both may be used depending on the drilling rig contracted.

- Chart recorders will be used for all pressure tests.
- Test charts, with individual test results identified, shall be maintained on location while drilling and shall be made available to a representative upon request.
- Mud volumes will be monitored visually.
- Upper and Lower Kelly cocks will be utilized.
- A gas buster will be utilized, if necessary.

Depth Intervals

BOP Equipment

0 – 1500'

No Pressure Control

1500' – 6678'

11" 3000# Ram Type BOP

11" 3000# Annular BOP

D,E Proposed Casing and Cementing Program

Purpose	Depth	Hole Size	Casing Size	Type	Connection	Weight
Surface	1500'	13.50"	8.625"	J of K-55	ST&C	32#
Parasite String	1900'	13.50"	1.90"	J-55	IJ	2.76#
Production	6678'	7.875"	5-1/2"	N-80 or Lida 80	LT&C	17#

Surface	Type & Amount
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0' – 1500'

Lead with approximately 270 sx Premium Type 5 cement with additives mixed at 11.0 ppg (yield = 3.82 cuft/sx), calculated hole volume with 100% excess.

Tail with approximately 350 sx Premium G cement with additives mixed at 15.8 ppg (yield = 1.15 cuft/sx).

Top out cement, if required: 150sx of Premium cement with additives mixed at 15.8 ppg (yield = 1.15 cuft/sx).

Parasite

We will run an air injection collar +/- 1900' that contains a check valve (delta P = +/- 3500 psi) for our air injection into the annulus of the DP X 8-5/8" surface casing during production hole drilling. Once we drill our production hole section with aerated mud we will case and cement as usual. We will then abandon our parasite string with cement to assure future isolation of that string.

Production	Type & Amount
0' – 3500'	Lead: +/- 200 SX Premium Type V + additives or similar slurry with a minimum weight of 11.0 #/gal and approximate yield of 3.82 cuft/sx
3500' – 6678'	Tail: +/- 390 SX Premium Lite Tail + additives or similar slurry with a minimum weight of 13.1 #/gal and approximate yield of 1.70cuft/sk.

For production casing, actual cement volumes will be determined from the caliper log plus a minimum of 15% excess.

F Drilling Fluids Program

Interval	Weight	Viscosity	Fluid Loss	Remarks
0' – 1500'	8.4 – 9.5	27	NC	DAP Mud
1500'-6678'	8.4 – 9.5	27	NC	DAP Water

G Evaluation Program

Logging Program: HRI-GR-SP with SDI-DEN-PE surface casing to TD.
 Preserve samples from all show intervals.
 Sampling: 10' dry cut samples: Douglas Creek to TD. Preserve samples
 From all show intervals.
 Surveys: As deemed necessary
 Mud Logger: As deemed necessary
 Drill Stem Tests: As deemed necessary
 Cores: As deemed necessary

H Anticipated Abnormal Pressures or Temperatures

No abnormal temperatures or pressures or other hazards are anticipated.

Shallow gas and/or water flows are possible below surface casing.

Maximum anticipated bottom hole pressure equals approximately 3299psi* and maximum anticipated surface pressure equals approximately 1830**psi (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

*Max Mud Wt x 0.052 x TD = A (bottom hole pressure)

**Maximum surface pressure = A – (0.22xTD)

I Anticipated Starting Dates and Notification of Operations

Drilling Activity:

Anticipated Commencement Date:	Upon approval of the APD.
Drilling Days:	Approximately 10 days.
Completion Days:	Approximately 7 days.

R6W
76
W

T5S, R6W, U.S.B.&M.

BERRY PETROLEUM COMPANY

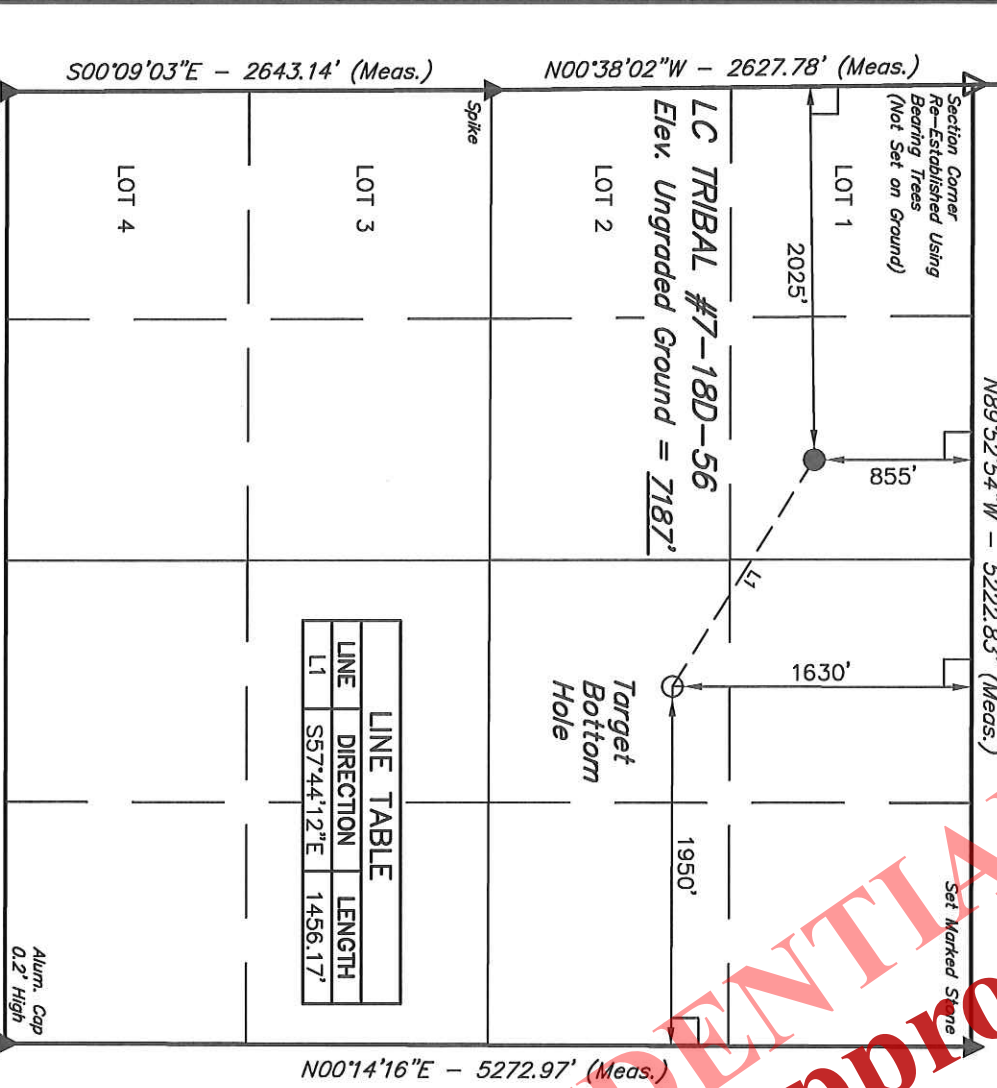
Well location, LC TRIBAL #7-18D-56, located as shown in the NE 1/4 NW 1/4 of Section 18, T5S, R6W, U.S.B.&M., Duchesne County, Utah.

BASIS OF ELEVATION

BENCH MARK (M67) LOCATED IN THE SW 1/4 OF SECTION 9, T5S, R4W, U.S.B.&M., TAKEN FROM THE DUCHESE SE QUADRANGLE, UTAH, DUCHESE COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED ON CAP AS BEING 6097 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.

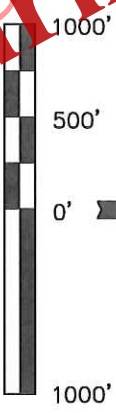


LINE TABLE		
LINE	DIRECTION	LENGTH
L1	S57°44'12"E	1456.17'

LEGEND:

- 90° SYMBOL
- PROPOSED WELL HEAD.
- SECTION CORNERS LOCATED
- SECTION CORNERS RE-ESTABLISHED.
- (Not Set on Ground)

NAD 83 (TARGET BOTTOM HOLE)		NAD 83 (SURFACE LOCATION)	
LATITUDE = 40°02'57.52" (40.049311)	LATITUDE = 40°03'05.17" (40.051436)	LATITUDE = 40°03'05.17" (40.051436)	LATITUDE = 40°03'05.17" (40.051436)
LONGITUDE = 110°35'59.20" (110.599778)	LONGITUDE = 110°36'15.06" (110.604183)	LONGITUDE = 110°36'15.06" (110.604183)	LONGITUDE = 110°36'15.06" (110.604183)
NAD 27 (TARGET BOTTOM HOLE)		NAD 27 (SURFACE LOCATION)	
LATITUDE = 40°02'57.67" (40.049353)	LATITUDE = 40°03'05.32" (40.051478)	LATITUDE = 40°03'05.32" (40.051478)	LATITUDE = 40°03'05.32" (40.051478)
LONGITUDE = 110°35'56.64" (110.599067)	LONGITUDE = 110°36'12.50" (110.603472)	LONGITUDE = 110°36'12.50" (110.603472)	LONGITUDE = 110°36'12.50" (110.603472)



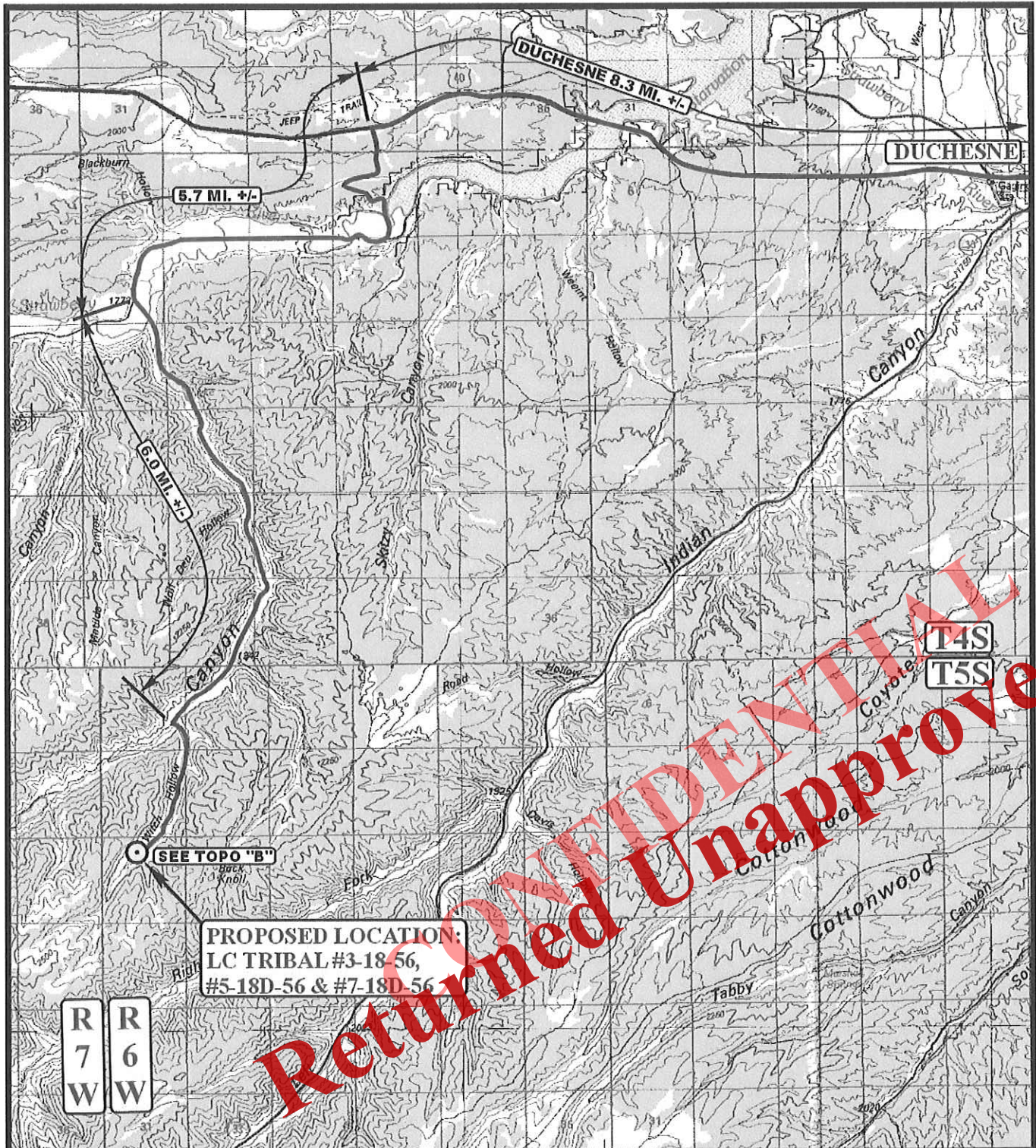
CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF A SURVEY MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

UNTAR ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST - VERNAL, UTAH 84078
(435) 789-1017

SCALE		DATE SURVEYED:		DATE DRAWN:	
1" = 1000'		07-26-12		08-08-12	
PARTY		REFERENCES		FILE	
C.A. A.S. C.A.G.		G.L.O. PLAT		BERRY PETROLEUM COMPANY	
WEATHER					
COLD					



LEGEND:

⊙ PROPOSED LOCATION

BERRY PETROLEUM COMPANY

LC TRIBAL #3-18-56, #5-18D-56 & #7-18D-56
SECTION 18, T5S, R6W, U.S.B.&M
NE 1/4 NW 1/4



Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

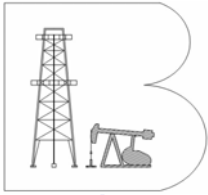


TOPOGRAPHIC
MAP

1 5 07
MONTH DAY YEAR



SCALE: 1:100,000 DRAWN BY: J.L.G. REV: 08-09-12 C.I.



Berry Petroleum Company

Duchesne Co., UT (UT27C)

Sec.18-T5S-R6W

LC Tribal 7-18D-56

Wellbore #1

Plan: Design #1

Standard Planning Report

25 April, 2013

CONFIDENTIAL
Returned Unapproved

Archer

Received: April 30, 2013



Project: Duchesne Co., UT (UT27C)
Site: Sec.18-T5S-R6W
Well: LC Tribal 7-18D-56
Wellbore: Wellbore #1
Design: Design #1
Latitude: 40° 3' 5.321 N
Longitude: 110° 36' 12.499 W
Ground Level: 7185.00
WELL @ 7207.00usft (Original Well Elev)

Archer

PROJECT DETAILS: Duchesne Co., UT (UT27C)

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: Utah Central 4302

System Datum: Mean Sea Level

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well LC Tribal 7-18D-56, True North
Vertical (TVD) Reference: WELL @ 7207.00usft (Original Well Elev)
Section (VS) Reference: Slot - (0.00N, 0.00E)
Measured Depth Reference: WELL @ 7207.00usft (Original Well Elev)
Calculation Method: Minimum Curvature

WELL DETAILS: LC Tribal 7-18D-56

+N/-S	+E/-W	Northing	Ground Level:	7185.00	Latitude	Longitude	Slot
0.00	0.00	627053.693	Easting	2250964.061	40° 3' 5.321 N	110° 36' 12.499 W	

DESIGN TARGET DETAILS

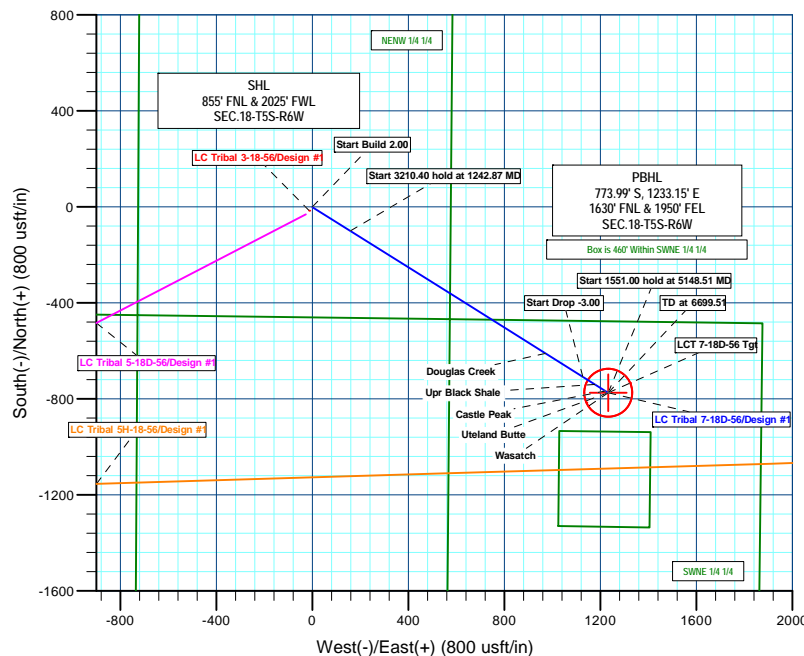
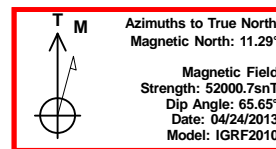
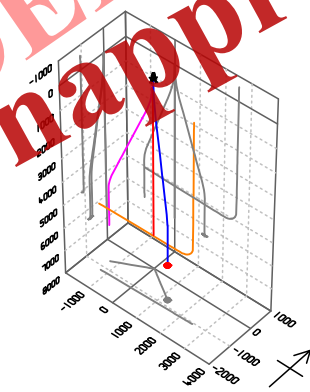
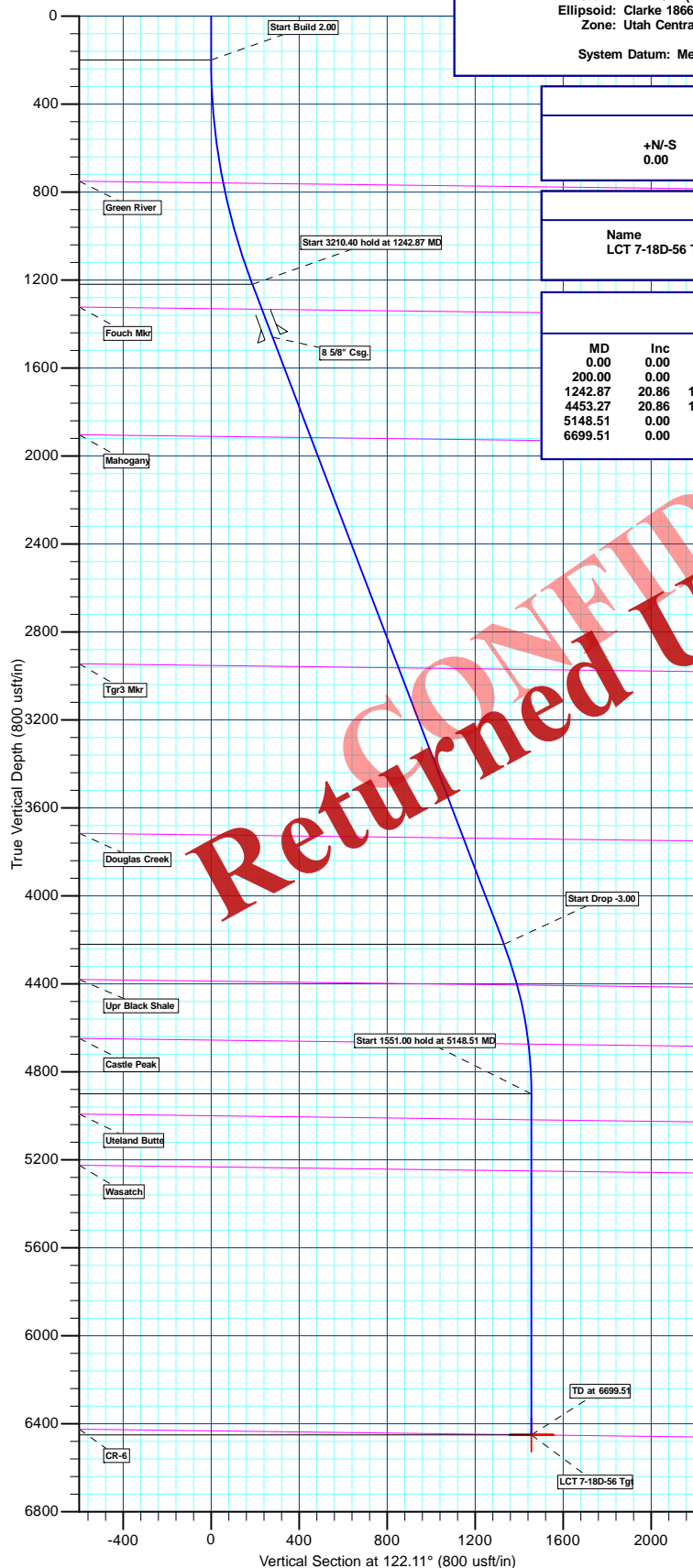
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
LCT 7-18D-56 Tgt	6451.00	-773.99	1233.15	40° 2' 57.671 N	110° 35' 56.641 W	Circle (Radius: 100.00)

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Wcst	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	Start Build 2.00
1242.87	20.86	122.11	1219.99	-99.80	159.00	2.00	122.11	0.73	Start 3210.40 hold at 1242.87 MD
4453.27	20.86	122.11	4220.01	-707.46	1127.14	0.00	0.00	1330.77	Start Drop -3.00
5148.51	0.00	0.00	4900.00	-773.99	1233.15	3.00	80.00	1455.92	Start 1551.00 hold at 5148.51 MD
6699.51	0.00	0.00	6451.00	-773.99	1233.15	0.00	0.00	1455.92	TD at 6699.51

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
758.68	762.28	Green River
1332.86	1363.66	Fouch Mkr
1916.62	1988.35	Mahogany
2963.56	3108.71	Tgr3 Mkr
3737.21	3936.61	Douglas Creek
4405.23	4648.04	Upr Black Shale
4673.88	4921.86	Castle Peak
5018.04	5266.56	Uteland Butte
5251.04	5499.56	Wasatch



Plan: Design #1 (LC Tribal 7-18D-56/Wellbore #1)

Created By: Bret Wolford Date: 10:42 April 25 2013

Received: April 30, 2013



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well LC Tribal 7-18D-56
Company:	Berry Petroleum Company	TVD Reference:	WELL @ 7207.00usft (Original Well Elev)
Project:	Duchesne Co., UT (UT27C)	MD Reference:	WELL @ 7207.00usft (Original Well Elev)
Site:	Sec.18-T5S-R6W	North Reference:	True
Well:	LC Tribal 7-18D-56	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	Duchesne Co., UT (UT27C)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Utah Central 4302		

Site		Sec.18-T5S-R6W			
Site Position:		Northing:	626,027.075 usft	Latitude:	40° 2' 54.924 N
From:	Lat/Long	Easting:	2,253,483.068 usft	Longitude:	110° 35' 40.240 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.58 °

Well	LC Tribal 7-18D-56					
Well Position	+N/-S	1,052.07 usft	Northing:	627,053.693 usft	Latitude:	40° 3' 5.321 N
	+E/-W	-2,508.48 usft	Easting:	2,250,964.061 usft	Longitude:	110° 36' 12.499 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	7,185.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	04/24/13	11.29	65.65	52,001

Design	Design #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	122.11

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,242.87	20.86	122.11	1,219.99	-99.80	159.00	2.00	2.00	0.00	122.11	
4,453.27	20.86	122.11	4,220.01	-707.46	1,127.14	0.00	0.00	0.00	0.00	
5,148.51	0.00	0.00	4,900.00	-773.99	1,233.15	3.00	-3.00	0.00	180.00	
6,699.51	0.00	0.00	6,451.00	-773.99	1,233.15	0.00	0.00	0.00	0.00	



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well LC Tribal 7-18D-56
Company:	Berry Petroleum Company	TVD Reference:	WELL @ 7207.00usft (Original Well Elev)
Project:	Duchesne Co., UT (UT27C)	MD Reference:	WELL @ 7207.00usft (Original Well Elev)
Site:	Sec.18-T5S-R6W	North Reference:	True
Well:	LC Tribal 7-18D-56	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	2.00	122.11	299.98	-0.93	1.48	1.75	2.00	2.00	0.00
400.00	4.00	122.11	399.84	-3.71	5.91	6.98	2.00	2.00	0.00
500.00	6.00	122.11	499.45	-8.34	13.29	15.69	2.00	2.00	0.00
600.00	8.00	122.11	598.70	-14.82	23.61	27.88	2.00	2.00	0.00
700.00	10.00	122.11	697.47	-23.14	36.86	43.52	2.00	2.00	0.00
Green River									
762.28	11.25	122.11	758.68	-29.24	46.59	55.00	2.00	2.00	0.00
800.00	12.00	122.11	795.62	-33.28	53.02	62.60	2.00	2.00	0.00
900.00	14.00	122.11	893.06	-45.24	72.08	85.10	2.00	2.00	0.00
1,000.00	16.00	122.11	989.64	-59.00	94.00	110.98	2.00	2.00	0.00
1,100.00	18.00	122.11	1,085.27	-74.54	118.76	140.23	2.00	2.00	0.00
1,200.00	20.00	122.11	1,179.82	-91.85	146.33	172.77	2.00	2.00	0.00
Start 3210.40 hold at 1242.87 MD									
1,242.87	20.86	122.11	1,219.99	-99.80	158.00	187.73	2.00	2.00	0.00
1,300.00	20.86	122.11	1,273.38	-110.61	176.23	208.07	0.00	0.00	0.00
Fouch Mkr									
1,363.66	20.86	122.11	1,332.66	-122.66	195.43	230.74	0.00	0.00	0.00
1,400.00	20.86	122.11	1,376.82	-129.54	206.39	243.68	0.00	0.00	0.00
8 5/8" Csg.									
1,500.00	20.86	122.11	1,400.27	-148.47	236.55	279.28	0.00	0.00	0.00
1,600.00	20.86	122.11	1,553.72	-167.40	266.70	314.88	0.00	0.00	0.00
1,700.00	20.86	122.11	1,647.16	-186.32	296.86	350.49	0.00	0.00	0.00
1,800.00	20.86	122.11	1,740.61	-205.25	327.02	386.09	0.00	0.00	0.00
1,900.00	20.86	122.11	1,834.06	-224.18	357.17	421.70	0.00	0.00	0.00
Mahogany									
1,988.35	20.86	122.11	1,916.62	-240.90	383.81	453.15	0.00	0.00	0.00
2,000.00	20.86	122.11	1,927.50	-243.11	387.33	457.30	0.00	0.00	0.00
2,100.00	20.86	122.11	2,020.95	-262.04	417.48	492.91	0.00	0.00	0.00
2,200.00	20.86	122.11	2,114.40	-280.96	447.64	528.51	0.00	0.00	0.00
2,300.00	20.86	122.11	2,207.85	-299.89	477.80	564.11	0.00	0.00	0.00
2,400.00	20.86	122.11	2,301.29	-318.82	507.95	599.72	0.00	0.00	0.00
2,500.00	20.86	122.11	2,394.74	-337.75	538.11	635.32	0.00	0.00	0.00
2,600.00	20.86	122.11	2,488.19	-356.67	568.27	670.93	0.00	0.00	0.00
2,700.00	20.86	122.11	2,581.63	-375.60	598.42	706.53	0.00	0.00	0.00
2,800.00	20.86	122.11	2,675.08	-394.53	628.58	742.13	0.00	0.00	0.00
2,900.00	20.86	122.11	2,768.53	-413.46	658.73	777.74	0.00	0.00	0.00
3,000.00	20.86	122.11	2,861.97	-432.39	688.89	813.34	0.00	0.00	0.00
3,100.00	20.86	122.11	2,955.42	-451.31	719.05	848.95	0.00	0.00	0.00
Tgr3 Mkr									
3,108.71	20.86	122.11	2,963.56	-452.96	721.67	852.05	0.00	0.00	0.00
3,200.00	20.86	122.11	3,048.87	-470.24	749.20	884.55	0.00	0.00	0.00
3,300.00	20.86	122.11	3,142.32	-489.17	779.36	920.16	0.00	0.00	0.00
3,400.00	20.86	122.11	3,235.76	-508.10	809.52	955.76	0.00	0.00	0.00
3,500.00	20.86	122.11	3,329.21	-527.02	839.67	991.36	0.00	0.00	0.00
3,600.00	20.86	122.11	3,422.66	-545.95	869.83	1,026.97	0.00	0.00	0.00
3,700.00	20.86	122.11	3,516.10	-564.88	899.98	1,062.57	0.00	0.00	0.00
3,800.00	20.86	122.11	3,609.55	-583.81	930.14	1,098.18	0.00	0.00	0.00
3,900.00	20.86	122.11	3,703.00	-602.73	960.30	1,133.78	0.00	0.00	0.00
Douglas Creek									



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well LC Tribal 7-18D-56
Company:	Berry Petroleum Company	TVD Reference:	WELL @ 7207.00usft (Original Well Elev)
Project:	Duchesne Co., UT (UT27C)	MD Reference:	WELL @ 7207.00usft (Original Well Elev)
Site:	Sec.18-T5S-R6W	North Reference:	True
Well:	LC Tribal 7-18D-56	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,936.61	20.86	122.11	3,737.21	-609.66	971.34	1,146.82	0.00	0.00	0.00
4,000.00	20.86	122.11	3,796.44	-621.66	990.45	1,169.39	0.00	0.00	0.00
4,100.00	20.86	122.11	3,889.89	-640.59	1,020.61	1,204.99	0.00	0.00	0.00
4,200.00	20.86	122.11	3,983.34	-659.52	1,050.77	1,240.59	0.00	0.00	0.00
4,300.00	20.86	122.11	4,076.79	-678.45	1,080.92	1,276.20	0.00	0.00	0.00
4,400.00	20.86	122.11	4,170.23	-697.37	1,111.08	1,311.80	0.00	0.00	0.00
Start Drop -3.00									
4,453.27	20.86	122.11	4,220.01	-707.46	1,127.14	1,330.77	0.00	0.00	0.00
4,500.00	19.46	122.11	4,263.88	-716.02	1,140.78	1,346.87	3.00	0.00	0.00
4,600.00	16.46	122.11	4,359.00	-732.40	1,166.89	1,377.69	3.00	-3.00	0.00
Upr Black Shale									
4,648.04	15.01	122.11	4,405.23	-739.33	1,177.92	1,390.72	3.00	-3.00	0.00
4,700.00	13.46	122.11	4,455.60	-746.12	1,188.74	1,403.50	3.00	-3.00	0.00
4,800.00	10.46	122.11	4,553.42	-757.13	1,206.29	1,424.21	3.00	-3.00	0.00
4,900.00	7.46	122.11	4,652.19	-765.41	1,219.47	1,439.78	3.00	-3.00	0.00
Castle Peak									
4,921.86	6.80	122.11	4,673.88	-766.85	1,221.77	1,442.49	3.00	-3.00	0.00
5,000.00	4.46	122.11	4,751.64	-770.92	1,229.26	1,450.15	3.00	-3.00	0.00
5,100.00	1.46	122.11	4,851.49	-773.66	1,232.62	1,455.31	3.00	-3.00	0.00
Start 1551.00 hold at 5148.51 MD									
5,148.51	0.00	0.00	4,900.00	-773.99	1,233.15	1,455.92	3.00	-3.00	0.00
5,200.00	0.00	0.00	4,951.49	-773.99	1,233.15	1,455.92	0.00	0.00	0.00
Uteland Butte									
5,266.56	0.00	0.00	5,018.04	-773.99	1,233.15	1,455.92	0.00	0.00	0.00
5,300.00	0.00	0.00	5,051.49	-773.99	1,233.15	1,455.92	0.00	0.00	0.00
5,400.00	0.00	0.00	5,151.49	-773.99	1,233.15	1,455.92	0.00	0.00	0.00
Wasatch									
5,499.56	0.00	0.00	5,251.04	-773.99	1,233.15	1,455.92	0.00	0.00	0.00
5,500.00	0.00	0.00	5,251.49	-773.99	1,233.15	1,455.92	0.00	0.00	0.00
5,600.00	0.00	0.00	5,351.49	-773.99	1,233.15	1,455.92	0.00	0.00	0.00
5,700.00	0.00	0.00	5,451.49	-773.99	1,233.15	1,455.92	0.00	0.00	0.00
5,800.00	0.00	0.00	5,551.49	-773.99	1,233.15	1,455.92	0.00	0.00	0.00
5,900.00	0.00	0.00	5,651.49	-773.99	1,233.15	1,455.92	0.00	0.00	0.00
6,000.00	0.00	0.00	5,751.49	-773.99	1,233.15	1,455.92	0.00	0.00	0.00
6,100.00	0.00	0.00	5,851.49	-773.99	1,233.15	1,455.92	0.00	0.00	0.00
6,200.00	0.00	0.00	5,951.49	-773.99	1,233.15	1,455.92	0.00	0.00	0.00
6,300.00	0.00	0.00	6,051.49	-773.99	1,233.15	1,455.92	0.00	0.00	0.00
6,400.00	0.00	0.00	6,151.49	-773.99	1,233.15	1,455.92	0.00	0.00	0.00
6,500.00	0.00	0.00	6,251.49	-773.99	1,233.15	1,455.92	0.00	0.00	0.00
6,600.00	0.00	0.00	6,351.49	-773.99	1,233.15	1,455.92	0.00	0.00	0.00
TD at 6699.51 - LCT 7-18D-56 Tgt									
6,699.51	0.00	0.00	6,451.00	-773.99	1,233.15	1,455.92	0.00	0.00	0.00

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
LCT 7-18D-56 Tgt	0.00	0.00	6,451.00	-773.99	1,233.15	626,292.103	2,252,204.903	40° 2' 57.671 N	110° 35' 56.641 W
- plan hits target center									
- Circle (radius 100.00)									

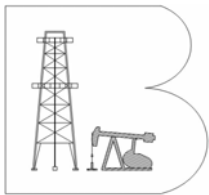


Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well LC Tribal 7-18D-56
Company:	Berry Petroleum Company	TVD Reference:	WELL @ 7207.00usft (Original Well Elev)
Project:	Duchesne Co., UT (UT27C)	MD Reference:	WELL @ 7207.00usft (Original Well Elev)
Site:	Sec.18-T5S-R6W	North Reference:	True
Well:	LC Tribal 7-18D-56	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Casing Points				
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
1,500.00	1,460.27	8 5/8" Csg.	8-5/8	12-1/4

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
762.28	758.00	Green River		0.71	122.11
1,363.66	1,330.00	Fouch Mkr		0.71	122.11
1,988.35	1,911.00	Mahogany		0.71	122.11
3,108.71	2,953.00	Tgr3 Mkr		0.71	122.11
3,936.61	3,723.00	Douglas Creek		0.71	122.11
4,648.04	4,388.00	Upr Black Shale		0.71	122.11
4,921.86	4,656.00	Castle Peak		0.71	122.11
5,266.56	5,000.00	Uteland Butte		0.71	122.11
5,499.56	5,233.00	Wasatch		0.71	122.11

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
200.00	200.00	0.00	0.00	Start Build 2.00
1,242.87	1,219.39	-99.80	159.00	Start 3210.40 hold at 1242.87 MD
4,453.27	4,220.00	-707.46	1,127.14	Start Drop -3.00
5,148.51	4,900.00	-773.99	1,233.15	Start 1551.00 hold at 5148.51 MD
6,699.51	6,451.00	-773.99	1,233.15	TD at 6699.51



Berry Petroleum Company

Duchesne Co., UT (UT27C)

Sec.18-T5S-R6W

LC Tribal 7-18D-56

Wellbore #1

Design #1

Anticollision Report

25 April, 2013

CONFIDENTIAL
Returned Unapproved

Archer



Company:	Berry Petroleum Company	Local Co-ordinate Reference:	Well LC Tribal 7-18D-56
Project:	Duchesne Co., UT (UT27C)	TVD Reference:	WELL @ 7207.00usft (Original Well Elev)
Reference Site:	Sec.18-T5S-R6W	MD Reference:	WELL @ 7207.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	LC Tribal 7-18D-56	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.1 Single User Db
Reference Design:	Design #1	Offset TVD Reference:	Reference Datum

Reference	Design #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 9,999.98 usft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program		Date	04/25/13		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	6,699.51	Design #1 (Wellbore #1)	MWD	MWD - Standard	

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Sec.18-T5S-R6W						
LC Tribal 3-18-56 - Wellbore #1 - Design #1	200.00	200.00	20.18	19.55	32.292	CC
LC Tribal 3-18-56 - Wellbore #1 - Design #1	300.00	299.98	20.51	19.45	19.387	ES
LC Tribal 3-18-56 - Wellbore #1 - Design #1	500.00	499.45	27.35	25.38	13.907	SF
LC Tribal 5-18D-56 - Wellbore #1 - Design #1	200.00	200.00	40.54	39.91	64.878	CC, ES
LC Tribal 5-18D-56 - Wellbore #1 - Design #1	500.00	493.72	61.03	59.07	31.083	SF
LC Tribal 5H-18-56 - Wellbore #1 - Design #1	5,354.29	6,765.87	315.63	252.98	5.038	CC, ES, SF

Sec. 18-T5S-R6W - LC Tribal 3-18-56 - Wellbore #1 - Design #1													Offset Site Error:	0.00 usft
Survey Program: 00 MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	-139.30	-15.30	-13.16	20.18					
100.00	100.00	100.00	100.00	0.09	0.09	-139.30	-15.30	-13.16	20.18	20.00	0.18	115.093		
200.00	200.00	200.00	200.00	0.31	0.31	-139.30	-15.30	-13.16	20.18	19.55	0.62	32.292 CC		
300.00	299.98	299.98	299.98	0.52	0.54	-134.48	-15.30	-13.16	20.51	19.45	1.06	19.387 ES		
400.00	399.84	399.84	399.84	0.74	0.76	-121.29	-15.30	-13.16	22.31	20.81	1.50	14.875		
500.00	499.45	499.45	499.45	0.99	0.99	-104.73	-15.30	-13.16	27.35	25.38	1.97	13.907 SF		
600.00	598.70	598.70	598.70	1.27	1.21	-90.74	-15.30	-13.16	36.77	34.34	2.44	15.081		
700.00	697.47	697.47	697.47	1.61	1.43	-81.09	-15.30	-13.16	50.63	47.72	2.91	17.419		
800.00	795.62	795.62	795.62	2.00	1.65	-74.80	-15.30	-13.16	68.58	65.21	3.37	20.335		
900.00	893.06	893.06	893.06	2.45	1.87	-70.64	-15.30	-13.16	90.34	86.50	3.84	23.534		
1,000.00	989.64	989.64	989.64	2.96	2.09	-67.81	-15.30	-13.16	115.72	111.41	4.31	26.870		
1,100.00	1,085.27	1,085.27	1,085.27	3.54	2.30	-65.82	-15.30	-13.16	144.61	139.83	4.78	30.270		
1,200.00	1,179.82	1,179.82	1,179.82	4.19	2.51	-64.36	-15.30	-13.16	176.91	171.66	5.25	33.694		
1,242.87	1,219.99	1,219.99	1,219.99	4.49	2.61	-63.86	-15.30	-13.16	191.78	186.33	5.45	35.163		
1,300.00	1,273.38	1,273.38	1,273.38	4.90	2.73	-63.29	-15.30	-13.16	212.02	206.29	5.74	36.947		
1,400.00	1,366.82	1,366.82	1,366.82	5.62	2.94	-62.51	-15.30	-13.16	247.49	241.25	6.24	39.652		
1,500.00	1,460.27	1,460.27	1,460.27	6.36	3.15	-61.93	-15.30	-13.16	283.00	276.25	6.75	41.925		
1,600.00	1,553.72	1,553.72	1,553.72	7.10	3.36	-61.48	-15.30	-13.16	318.52	311.26	7.26	43.858		
1,700.00	1,647.16	1,647.16	1,647.16	7.84	3.57	-61.12	-15.30	-13.16	354.06	346.28	7.78	45.519		
1,800.00	1,740.61	1,740.61	1,740.61	8.58	3.78	-60.82	-15.30	-13.16	389.61	381.32	8.30	46.960		
1,900.00	1,834.06	1,834.06	1,834.06	9.33	3.99	-60.58	-15.30	-13.16	425.18	416.36	8.82	48.221		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Company:	Berry Petroleum Company	Local Co-ordinate Reference:	Well LC Tribal 7-18D-56
Project:	Duchesne Co., UT (UT27C)	TVD Reference:	WELL @ 7207.00usft (Original Well Elev)
Reference Site:	Sec.18-T5S-R6W	MD Reference:	WELL @ 7207.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	LC Tribal 7-18D-56	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.1 Single User Db
Reference Design:	Design #1	Offset TVD Reference:	Reference Datum

Offset Design Sec.18-T5S-R6W - LC Tribal 3-18-56 - Wellbore #1 - Design #1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
2,000.00	1,927.50	1,927.50	1,927.50	10.08	4.20	-60.37	-15.30	-13.16	460.74	451.40	9.34	49.332		
2,100.00	2,020.95	2,020.95	2,020.95	10.83	4.41	-60.19	-15.30	-13.16	496.32	486.45	9.86	50.318		
2,200.00	2,114.40	2,114.40	2,114.40	11.58	4.62	-60.04	-15.30	-13.16	531.89	521.51	10.39	51.199		
2,300.00	2,207.85	2,207.85	2,207.85	12.33	4.83	-59.90	-15.30	-13.16	567.48	556.56	10.92	51.989		
2,400.00	2,301.29	2,301.29	2,301.29	13.08	5.04	-59.78	-15.30	-13.16	603.06	591.62	11.44	52.703		
2,500.00	2,394.74	2,394.74	2,394.74	13.84	5.25	-59.68	-15.30	-13.16	638.64	626.67	11.97	53.351		
2,600.00	2,488.19	2,488.19	2,488.19	14.59	5.46	-59.58	-15.30	-13.16	674.23	661.73	12.50	53.941		
2,700.00	2,581.63	2,581.63	2,581.63	15.35	5.67	-59.50	-15.30	-13.16	709.82	696.79	13.03	54.579		
2,800.00	2,675.08	2,675.08	2,675.08	16.10	5.88	-59.42	-15.30	-13.16	745.41	731.85	13.56	55.197		
2,900.00	2,768.53	2,768.53	2,768.53	16.85	6.09	-59.35	-15.30	-13.16	781.00	766.91	14.09	55.829		
3,000.00	2,861.97	2,861.97	2,861.97	17.61	6.30	-59.29	-15.30	-13.16	816.60	801.88	14.62	55.849		
3,100.00	2,955.42	2,955.42	2,955.42	18.36	6.51	-59.23	-15.30	-13.16	852.19	837.04	15.15	56.238		
3,200.00	3,048.87	3,048.87	3,048.87	19.12	6.72	-59.17	-15.30	-13.16	887.78	872.10	15.69	56.600		
3,300.00	3,142.32	3,142.32	3,142.32	19.87	6.93	-59.12	-15.30	-13.16	923.36	907.16	16.22	56.936		
3,400.00	3,235.76	3,235.76	3,235.76	20.63	7.14	-59.08	-15.30	-13.16	958.95	942.23	16.75	57.250		
3,500.00	3,329.21	3,329.21	3,329.21	21.39	7.35	-59.03	-15.30	-13.16	994.58	977.29	17.28	57.543		
3,600.00	3,422.66	3,422.66	3,422.66	22.14	7.56	-59.00	-15.30	-13.16	1,030.17	1,012.36	17.82	57.818		
3,700.00	3,516.10	3,516.10	3,516.10	22.90	7.77	-58.96	-15.30	-13.16	1,065.77	1,047.42	18.35	58.076		
3,800.00	3,609.55	3,609.55	3,609.55	23.65	7.98	-58.92	-15.30	-13.16	1,101.37	1,082.48	18.89	58.318		
3,900.00	3,703.00	3,703.00	3,703.00	24.41	8.19	-58.88	-15.30	-13.16	1,136.97	1,117.55	19.42	58.547		
4,000.00	3,796.44	3,796.44	3,796.44	25.17	8.40	-58.85	-15.30	-13.16	1,172.57	1,152.61	19.95	58.762		
4,100.00	3,889.89	3,889.89	3,889.89	25.92	8.61	-58.83	-15.30	-13.16	1,208.17	1,187.68	20.49	58.965		
4,200.00	3,983.34	3,983.34	3,983.34	26.68	8.82	-58.80	-15.30	-13.16	1,243.76	1,222.74	21.02	59.157		
4,300.00	4,076.79	4,076.79	4,076.79	27.44	9.03	-58.78	-15.30	-13.16	1,279.36	1,257.80	21.56	59.340		
4,400.00	4,170.23	4,170.23	4,170.23	28.20	9.24	-58.75	-15.30	-13.16	1,314.96	1,292.87	22.10	59.512		
4,453.27	4,220.01	4,220.01	4,220.01	28.60	9.35	-58.74	-15.30	-13.16	1,333.93	1,311.55	22.38	59.601		
4,500.00	4,263.86	4,263.86	4,263.86	28.90	9.45	-58.73	-15.30	-13.16	1,350.03	1,327.34	22.69	59.492		
4,600.00	4,359.00	4,359.00	4,359.00	29.42	9.66	-58.71	-15.30	-13.16	1,380.85	1,357.56	23.29	59.286		
4,700.00	4,455.60	4,455.60	4,455.60	29.85	9.88	-58.70	-15.30	-13.16	1,406.65	1,382.83	23.82	59.059		
4,800.00	4,553.42	4,553.42	4,553.42	30.20	10.10	-58.69	-15.30	-13.16	1,427.36	1,403.09	24.27	58.814		
4,900.00	4,652.19	4,652.19	4,652.19	30.47	10.32	-58.68	-15.30	-13.16	1,442.92	1,418.28	24.64	58.556		
5,000.00	4,751.64	4,751.64	4,751.64	30.67	10.54	-58.67	-15.30	-13.16	1,453.30	1,428.36	24.93	58.286		
5,100.00	4,851.49	4,851.49	4,851.49	30.80	10.77	-58.67	-15.30	-13.16	1,458.45	1,433.31	25.14	58.007		
5,148.51	4,900.00	4,900.00	4,900.00	30.84	10.88	-58.67	-15.30	-13.16	1,459.07	1,433.85	25.22	57.856		
5,200.00	4,951.49	4,951.49	4,951.49	30.87	10.99	-58.67	-15.30	-13.16	1,459.07	1,433.66	25.41	57.427		
5,300.00	5,051.49	5,051.49	5,051.49	30.94	11.22	-58.67	-15.30	-13.16	1,459.07	1,433.30	25.77	56.624		
5,400.00	5,151.49	5,151.49	5,151.49	31.02	11.44	-58.67	-15.30	-13.16	1,459.07	1,432.94	26.13	55.838		
5,500.00	5,251.49	5,251.49	5,251.49	31.09	11.67	-58.67	-15.30	-13.16	1,459.07	1,432.57	26.50	55.069		
5,600.00	5,351.49	5,351.49	5,351.49	31.16	11.89	-58.67	-15.30	-13.16	1,459.07	1,432.21	26.86	54.317		
5,700.00	5,451.49	5,451.49	5,451.49	31.24	12.12	-58.67	-15.30	-13.16	1,459.07	1,431.84	27.23	53.581		
5,800.00	5,551.49	5,551.49	5,551.49	31.32	12.34	-58.67	-15.30	-13.16	1,459.07	1,431.47	27.60	52.861		
5,900.00	5,651.49	5,651.49	5,651.49	31.39	12.57	-58.67	-15.30	-13.16	1,459.07	1,431.09	27.97	52.157		
6,000.00	5,751.49	5,751.49	5,751.49	31.47	12.79	-58.67	-15.30	-13.16	1,459.07	1,430.72	28.35	51.468		
6,100.00	5,851.49	5,851.49	5,851.49	31.56	13.02	-58.67	-15.30	-13.16	1,459.07	1,430.34	28.73	50.794		
6,200.00	5,951.49	5,951.49	5,951.49	31.64	13.24	-58.67	-15.30	-13.16	1,459.07	1,429.97	29.10	50.134		
6,300.00	6,051.49	6,051.49	6,051.49	31.72	13.46	-58.67	-15.30	-13.16	1,459.07	1,429.59	29.48	49.488		
6,400.00	6,151.49	6,151.49	6,151.49	31.81	13.69	-58.67	-15.30	-13.16	1,459.07	1,429.20	29.86	48.856		
6,500.00	6,251.49	6,251.49	6,251.49	31.90	13.91	-58.67	-15.30	-13.16	1,459.07	1,428.82	30.25	48.238		
6,600.00	6,351.49	6,351.49	6,351.49	31.98	14.14	-58.67	-15.30	-13.16	1,459.07	1,428.44	30.63	47.632		
6,699.51	6,451.00	6,451.00	6,451.00	32.07	14.36	-58.67	-15.30	-13.16	1,459.07	1,428.05	31.02	47.042		



Company:	Berry Petroleum Company	Local Co-ordinate Reference:	Well LC Tribal 7-18D-56
Project:	Duchesne Co., UT (UT27C)	TVD Reference:	WELL @ 7207.00usft (Original Well Elev)
Reference Site:	Sec.18-T5S-R6W	MD Reference:	WELL @ 7207.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	LC Tribal 7-18D-56	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.1 Single User Db
Reference Design:	Design #1	Offset TVD Reference:	Reference Datum

Offset Design Sec.18-T5S-R6W - LC Tribal 5-18D-56 - Wellbore #1 - Design #1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	-139.00	-30.60	-26.59	40.54					
100.00	100.00	100.00	100.00	0.09	0.09	-139.00	-30.60	-26.59	40.54	40.36	0.18	231.230		
200.00	200.00	200.00	200.00	0.31	0.31	-139.00	-30.60	-26.59	40.54	39.91	0.62	64.878 CC, ES		
300.00	299.98	298.61	298.59	0.52	0.52	-135.83	-31.38	-28.10	42.47	41.43	1.04	40.762		
400.00	399.84	396.69	396.54	0.74	0.73	-127.92	-33.70	-32.59	48.91	47.43	1.48	33.049		
500.00	499.45	493.72	493.21	0.99	0.97	-118.72	-37.52	-39.95	61.03	59.07	1.96	31.083		
600.00	598.70	589.20	588.01	1.27	1.25	-110.76	-42.74	-50.03	79.48	77.00	2.48	32.07		
700.00	697.47	682.68	680.40	1.61	1.56	-104.72	-49.26	-62.61	104.25	101.24	3.02	34.399		
800.00	795.62	773.73	769.90	2.00	1.90	-100.28	-56.94	-77.43	135.06	131.47	3.68	37.68		
900.00	893.06	861.99	856.11	2.45	2.29	-96.99	-65.63	-94.20	171.55	167.37	4.18	41.090		
1,000.00	989.64	947.14	938.70	2.96	2.70	-94.48	-75.17	-112.61	213.40	208.81	4.79	44.521		
1,100.00	1,085.27	1,028.93	1,017.41	3.54	3.13	-92.48	-85.39	-132.33	260.32	251.38	5.44	47.858		
1,200.00	1,179.82	1,107.15	1,092.07	4.19	3.59	-90.82	-96.13	-153.05	312.41	305.00	6.11	51.036		
1,242.87	1,219.99	1,139.55	1,122.80	4.49	3.80	-90.19	-100.85	-162.16	335.55	329.14	6.41	52.329		
1,300.00	1,273.38	1,181.91	1,162.79	4.90	4.07	-89.45	-107.27	-175.43	367.81	360.99	6.82	53.954		
1,400.00	1,366.82	1,256.08	1,232.34	5.62	4.58	-88.52	-119.13	-197.41	425.76	418.22	7.54	56.439		
1,500.00	1,460.27	1,337.01	1,307.98	6.36	5.15	-87.99	-132.37	-222.97	484.36	476.06	8.30	58.359		
1,600.00	1,553.72	1,417.94	1,383.63	7.10	5.73	-87.58	-145.60	-248.51	543.00	533.95	9.04	60.051		
1,700.00	1,647.16	1,498.86	1,459.27	7.84	6.32	-87.24	-158.83	-274.04	601.65	591.85	9.80	61.376		
1,800.00	1,740.61	1,579.79	1,534.92	8.58	6.91	-86.91	-172.06	-299.57	660.32	649.75	10.57	62.453		
1,900.00	1,834.06	1,660.72	1,610.57	9.33	7.50	-86.71	-185.29	-325.11	719.00	707.65	11.35	63.353		
2,000.00	1,927.50	1,741.65	1,686.21	10.08	8.09	-86.54	-198.53	-350.64	777.69	765.56	12.13	64.112		
2,100.00	2,020.95	1,822.58	1,761.86	10.83	8.69	-86.38	-211.76	-376.17	836.39	823.47	12.92	64.758		
2,200.00	2,114.40	1,903.50	1,837.50	11.58	9.28	-86.23	-224.99	-401.71	895.09	881.39	13.70	65.314		
2,300.00	2,207.85	1,984.43	1,913.19	12.33	9.88	-86.10	-238.22	-427.24	953.80	939.30	14.50	65.793		
2,400.00	2,301.29	2,065.36	2,008.80	13.08	10.47	-85.99	-251.45	-452.77	1,012.51	997.22	15.29	66.211		
2,500.00	2,394.74	2,146.21	2,084.44	13.84	11.07	-85.89	-264.69	-478.31	1,071.23	1,055.14	16.09	66.580		
2,600.00	2,488.18	2,227.22	2,140.09	14.59	11.67	-85.80	-277.92	-503.84	1,129.95	1,113.06	16.89	66.906		
2,700.00	2,581.63	2,308.14	2,215.73	15.35	12.27	-85.72	-291.15	-529.37	1,188.67	1,170.98	17.69	67.197		
2,800.00	2,675.08	2,389.07	2,291.38	16.10	12.87	-85.64	-304.38	-554.90	1,247.39	1,228.90	18.49	67.457		
2,900.00	2,768.53	2,470.00	2,367.03	16.85	13.47	-85.58	-317.61	-580.44	1,306.12	1,286.82	19.30	67.690		
3,000.00	2,861.97	2,550.93	2,442.67	17.61	14.07	-85.52	-330.85	-605.97	1,364.84	1,344.74	20.10	67.901		
3,100.00	2,955.42	2,631.86	2,518.32	18.36	14.67	-85.46	-344.08	-631.50	1,423.57	1,402.66	20.91	68.092		
3,200.00	3,048.87	2,712.79	2,593.97	19.12	15.27	-85.41	-357.31	-657.04	1,482.30	1,460.58	21.71	68.266		
3,300.00	3,142.32	2,793.71	2,669.61	19.87	15.87	-85.36	-370.54	-682.57	1,541.03	1,518.51	22.52	68.426		
3,400.00	3,235.76	2,874.64	2,745.26	20.63	16.47	-85.32	-383.77	-708.10	1,599.76	1,576.43	23.33	68.571		
3,500.00	3,329.21	2,955.57	2,820.90	21.39	17.07	-85.28	-397.01	-733.64	1,658.49	1,634.35	24.14	68.705		
3,600.00	3,422.66	3,036.50	2,896.55	22.14	17.67	-85.24	-410.24	-759.17	1,717.22	1,692.27	24.95	68.829		
3,700.00	3,516.10	3,117.43	2,972.20	22.90	18.27	-85.20	-423.47	-784.70	1,775.95	1,750.19	25.76	68.943		
3,800.00	3,609.55	3,198.35	3,047.84	23.65	18.88	-85.17	-436.70	-810.24	1,834.69	1,808.12	26.57	69.049		
3,900.00	3,703.00	3,279.28	3,123.49	24.41	19.48	-85.14	-449.94	-835.77	1,893.42	1,866.04	27.38	69.147		
4,000.00	3,796.44	3,360.21	3,199.13	25.17	20.08	-85.11	-463.17	-861.30	1,952.15	1,923.96	28.19	69.238		
4,100.00	3,889.89	3,441.14	3,274.78	25.92	20.68	-85.08	-476.40	-886.84	2,010.89	1,981.88	29.01	69.323		
4,200.00	3,983.34	3,522.07	3,350.43	26.68	21.28	-85.05	-489.63	-912.37	2,069.62	2,039.80	29.82	69.403		
4,300.00	4,076.79	3,602.99	3,426.07	27.44	21.88	-85.03	-502.86	-937.90	2,128.36	2,097.73	30.63	69.477		
4,400.00	4,170.23	3,683.92	3,501.72	28.19	22.49	-85.01	-516.10	-963.44	2,187.10	2,155.65	31.45	69.547		
4,453.27	4,220.01	3,727.03	3,542.01	28.60	22.81	-84.99	-523.14	-977.04	2,218.38	2,186.50	31.88	69.582		
4,500.00	4,263.88	3,765.13	3,577.63	28.90	23.09	-84.99	-529.37	-989.06	2,245.44	2,213.07	32.37	69.365		
4,600.00	4,359.00	3,848.49	3,655.54	29.42	23.71	-85.04	-543.00	-1,015.36	2,300.63	2,267.30	33.34	69.012		
4,700.00	4,455.60	3,934.13	3,735.60	29.85	24.35	-85.16	-557.01	-1,042.38	2,352.04	2,317.79	34.25	68.674		
4,800.00	4,553.42	4,021.83	3,817.57	30.20	25.00	-85.33	-571.34	-1,070.05	2,399.52	2,364.42	35.10	68.369		
4,900.00	4,652.19	4,111.35	3,901.25	30.47	25.67	-85.57	-585.98	-1,098.29	2,442.98	2,407.11	35.87	68.107		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Company:	Berry Petroleum Company	Local Co-ordinate Reference:	Well LC Tribal 7-18D-56
Project:	Duchesne Co., UT (UT27C)	TVD Reference:	WELL @ 7207.00usft (Original Well Elev)
Reference Site:	Sec.18-T5S-R6W	MD Reference:	WELL @ 7207.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	LC Tribal 7-18D-56	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.1 Single User Db
Reference Design:	Design #1	Offset TVD Reference:	Reference Datum

Offset Design Sec.18-T5S-R6W - LC Tribal 5-18D-56 - Wellbore #1 - Design #1													Offset Site Error:		0.00 usft	
Survey Program: 0-MWD													Offset Well Error:		0.00 usft	
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
5,000.00	4,751.64	4,202.44	3,986.39	30.67	26.34	-85.87	-600.87	-1,127.03	2,482.32	2,445.76	36.56	67.897				
5,100.00	4,851.49	4,294.84	4,072.77	30.80	27.03	-86.22	-615.98	-1,156.19	2,517.48	2,480.31	37.16	67.743				
5,148.51	4,900.00	5,140.63	4,900.00	30.84	29.68	-87.90	-681.83	-1,283.25	2,518.08	2,478.88	39.21	64.225				
5,200.00	4,951.49	5,192.12	4,951.49	30.87	29.72	-87.90	-681.83	-1,283.25	2,518.08	2,478.77	39.31	64.055				
5,300.00	5,051.49	5,292.12	5,051.49	30.94	29.79	-87.90	-681.83	-1,283.25	2,518.08	2,478.57	39.51	63.733				
5,400.00	5,151.49	5,392.12	5,151.49	31.02	29.87	-87.90	-681.83	-1,283.25	2,518.08	2,478.37	39.71	63.407				
5,500.00	5,251.49	5,492.12	5,251.49	31.09	29.94	-87.90	-681.83	-1,283.25	2,518.08	2,478.16	39.92	63.079				
5,600.00	5,351.49	5,592.12	5,351.49	31.16	30.02	-87.90	-681.83	-1,283.25	2,518.08	2,477.95	40.13	62.748				
5,700.00	5,451.49	5,692.12	5,451.49	31.24	30.10	-87.90	-681.83	-1,283.25	2,518.08	2,477.74	40.34	62.414				
5,800.00	5,551.49	5,792.12	5,551.49	31.32	30.18	-87.90	-681.83	-1,283.25	2,518.08	2,477.52	40.55	62.078				
5,900.00	5,651.49	5,892.12	5,651.49	31.39	30.26	-87.90	-681.83	-1,283.25	2,518.08	2,477.30	40.79	61.739				
6,000.00	5,751.49	5,992.12	5,751.49	31.47	30.34	-87.90	-681.83	-1,283.25	2,518.08	2,477.07	41.01	61.399				
6,100.00	5,851.49	6,092.12	5,851.49	31.56	30.42	-87.90	-681.83	-1,283.25	2,518.08	2,476.84	41.24	61.057				
6,200.00	5,951.49	6,192.12	5,951.49	31.64	30.51	-87.90	-681.83	-1,283.25	2,518.08	2,476.61	41.47	60.714				
6,300.00	6,051.49	6,292.12	6,051.49	31.72	30.60	-87.90	-681.83	-1,283.25	2,518.08	2,476.37	41.71	60.369				
6,400.00	6,151.49	6,392.12	6,151.49	31.81	30.68	-87.90	-681.83	-1,283.25	2,518.08	2,476.13	41.95	60.024				
6,500.00	6,251.49	6,492.12	6,251.49	31.90	30.77	-87.90	-681.83	-1,283.25	2,518.08	2,475.89	42.20	59.677				
6,600.00	6,351.49	6,592.12	6,351.49	31.98	30.87	-87.90	-681.83	-1,283.25	2,518.08	2,475.64	42.44	59.330				
6,601.00	6,352.49	6,593.12	6,352.49	31.98	30.87	-87.90	-681.83	-1,283.25	2,518.08	2,475.64	42.44	59.326				
6,699.51	6,451.00	6,625.63	6,385.00	32.07	30.90	-87.90	-681.83	-1,283.25	2,518.95	2,476.34	42.61	59.120				



Company:	Berry Petroleum Company	Local Co-ordinate Reference:	Well LC Tribal 7-18D-56
Project:	Duchesne Co., UT (UT27C)	TVD Reference:	WELL @ 7207.00usft (Original Well Elev)
Reference Site:	Sec.18-T5S-R6W	MD Reference:	WELL @ 7207.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	LC Tribal 7-18D-56	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.1 Single User Db
Reference Design:	Design #1	Offset TVD Reference:	Reference Datum

Offset Design Sec.18-T5S-R6W - LC Tribal 5H-18-56 - Wellbore #1 - Design #1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	582.00	0.00	0.00	1.17	112.75	-1,051.82	2,508.59	2,720.18					
100.00	100.00	682.00	100.00	0.09	1.40	112.75	-1,051.82	2,508.59	2,720.18	2,718.69	1.49	1,830.901		
200.00	200.00	782.00	200.00	0.31	1.62	112.75	-1,051.82	2,508.59	2,720.18	2,718.24	1.94	1,405.604		
300.00	299.98	881.98	299.98	0.52	1.85	112.74	-1,051.82	2,508.59	2,718.45	2,716.08	2.37	1,147.039		
400.00	399.84	981.84	399.84	0.74	2.07	112.72	-1,051.82	2,508.59	2,713.29	2,710.49	2.80	967.773		
500.00	499.45	1,081.45	499.45	0.99	2.30	112.69	-1,051.82	2,508.59	2,704.69	2,701.45	3.25	833.113		
600.00	598.70	1,180.70	598.70	1.27	2.52	112.65	-1,051.82	2,508.59	2,692.67	2,688.98	3.69	728.781		
700.00	697.47	1,279.47	697.47	1.61	2.74	112.60	-1,051.82	2,508.59	2,677.24	2,673.10	4.15	645.220		
800.00	795.62	1,377.62	795.62	2.00	2.96	112.53	-1,051.82	2,508.59	2,658.43	2,653.82	4.60	577.340		
900.00	893.06	1,475.06	893.06	2.45	3.18	112.45	-1,051.82	2,508.59	2,636.25	2,631.18	5.01	520.303		
1,000.00	989.64	1,571.64	989.64	2.96	3.40	112.35	-1,051.82	2,508.59	2,610.74	2,605.21	5.53	471.718		
1,100.00	1,085.27	1,667.27	1,085.27	3.54	3.61	112.24	-1,051.82	2,508.59	2,581.93	2,577.22	6.01	429.694		
1,200.00	1,179.82	1,761.82	1,179.82	4.19	3.83	112.12	-1,051.82	2,508.59	2,549.41	2,543.38	6.49	392.868		
1,242.87	1,219.99	1,801.99	1,219.99	4.49	3.92	112.06	-1,051.82	2,508.59	2,535.13	2,528.43	6.70	378.421		
1,300.00	1,273.38	1,855.38	1,273.38	4.90	4.04	111.96	-1,051.82	2,508.59	2,511.11	2,508.10	7.00	359.133		
1,400.00	1,366.82	1,948.82	1,366.82	5.62	4.25	111.83	-1,051.82	2,508.59	2,480.07	2,472.52	7.54	328.861		
1,500.00	1,460.27	2,042.27	1,460.27	6.36	4.46	111.68	-1,051.82	2,508.59	2,445.04	2,436.96	8.09	302.385		
1,600.00	1,553.72	2,135.72	1,553.72	7.10	4.67	111.53	-1,051.82	2,508.59	2,410.04	2,401.40	8.64	279.080		
1,700.00	1,647.16	2,229.16	1,647.16	7.84	4.88	111.37	-1,051.82	2,508.59	2,375.05	2,365.86	9.19	258.437		
1,800.00	1,740.61	2,322.61	1,740.61	8.58	5.09	111.20	-1,051.82	2,508.59	2,340.07	2,330.33	9.75	240.043		
1,900.00	1,834.06	2,416.06	1,834.06	9.33	5.30	111.01	-1,051.82	2,508.59	2,305.12	2,294.81	10.31	223.561		
2,000.00	1,927.50	2,509.50	1,927.50	10.08	5.51	110.87	-1,051.82	2,508.59	2,270.19	2,259.32	10.88	208.716		
2,100.00	2,020.95	2,602.95	2,020.95	10.83	5.72	110.69	-1,051.82	2,508.59	2,235.28	2,223.84	11.45	195.282		
2,200.00	2,114.40	2,696.40	2,114.40	11.58	5.93	110.51	-1,051.82	2,508.59	2,200.40	2,188.38	12.02	183.071		
2,300.00	2,207.85	2,789.85	2,207.85	12.33	6.14	110.32	-1,051.82	2,508.59	2,165.53	2,152.94	12.60	171.926		
2,400.00	2,301.29	2,883.29	2,301.29	13.08	6.35	110.12	-1,051.82	2,508.59	2,130.69	2,117.52	13.18	161.716		
2,500.00	2,394.74	2,976.74	2,394.74	13.84	6.56	109.92	-1,051.82	2,508.59	2,095.88	2,082.12	13.76	152.328		
2,600.00	2,488.18	3,070.18	2,488.18	14.59	6.77	109.71	-1,051.82	2,508.59	2,061.09	2,046.74	14.35	143.670		
2,700.00	2,581.63	3,163.63	2,581.63	15.35	6.98	109.49	-1,051.82	2,508.59	2,026.33	2,011.39	14.94	135.660		
2,800.00	2,675.08	3,257.08	2,675.08	16.10	7.19	109.27	-1,051.82	2,508.59	1,991.60	1,976.07	15.53	128.229		
2,900.00	2,768.53	3,350.53	2,768.53	16.85	7.40	109.04	-1,051.82	2,508.59	1,956.91	1,940.77	16.13	121.317		
3,000.00	2,861.97	3,443.97	2,861.97	17.61	7.61	108.80	-1,051.82	2,508.59	1,922.24	1,905.51	16.73	114.872		
3,100.00	2,955.42	3,537.42	2,955.42	18.36	7.82	108.55	-1,051.82	2,508.59	1,887.61	1,870.27	17.34	108.848		
3,200.00	3,048.87	3,630.87	3,048.87	19.12	8.03	108.29	-1,051.82	2,508.59	1,853.02	1,835.06	17.95	103.207		
3,300.00	3,142.32	3,724.32	3,142.32	19.87	8.24	108.02	-1,051.82	2,508.59	1,818.47	1,799.89	18.57	97.913		
3,400.00	3,235.76	3,817.76	3,235.76	20.63	8.45	107.75	-1,051.82	2,508.59	1,783.95	1,764.76	19.20	92.935		
3,500.00	3,329.21	3,911.21	3,329.21	21.39	8.66	107.46	-1,051.82	2,508.59	1,749.49	1,729.66	19.83	88.246		
3,600.00	3,422.66	4,004.66	3,422.66	22.14	8.87	107.16	-1,051.82	2,508.59	1,715.06	1,694.60	20.46	83.822		
3,700.00	3,516.10	4,098.10	3,516.10	22.90	9.08	106.85	-1,100.17	883.13	1,670.41	1,628.87	41.54	40.208		
3,800.00	3,609.55	4,191.55	3,609.55	23.65	9.29	106.54	-1,099.23	914.62	1,576.17	1,533.47	42.71	36.908		
3,900.00	3,703.00	4,285.00	3,703.00	24.41	9.50	106.23	-1,098.29	946.11	1,482.02	1,438.09	43.93	33.734		
4,000.00	3,796.44	4,378.44	3,796.44	25.17	9.71	105.92	-1,097.36	977.60	1,387.97	1,342.74	45.23	30.685		
4,100.00	3,889.89	4,471.89	3,889.89	25.92	9.92	105.61	-1,096.42	1,009.08	1,294.05	1,247.44	46.61	27.761		
4,200.00	3,983.34	4,565.34	3,983.34	26.68	10.13	105.30	-1,095.48	1,040.57	1,200.28	1,152.19	48.09	24.961		
4,300.00	4,076.79	4,658.79	4,076.79	27.44	10.34	104.99	-1,094.55	1,072.06	1,106.70	1,057.05	49.66	22.288		
4,400.00	4,170.23	4,752.23	4,170.23	28.19	10.55	104.68	-1,093.61	1,103.55	1,013.38	962.05	51.33	19.744		
4,453.27	4,220.01	4,802.01	4,220.01	28.60	10.66	104.59	-1,093.11	1,120.32	963.79	911.53	52.26	18.442		
4,500.00	4,263.88	4,845.88	4,263.88	28.90	10.77	104.50	-1,092.69	1,134.59	920.30	865.44	54.86	16.775		
4,600.00	4,357.33	4,939.33	4,357.33	29.42	10.98	104.20	-1,091.87	1,162.15	827.31	767.62	59.69	13.861		
4,700.00	4,450.78	5,032.78	4,450.78	29.85	11.19	103.90	-1,091.17	1,185.56	735.03	672.13	62.90	11.686		
4,800.00	4,544.23	5,126.23	4,544.23	30.20	11.40	103.60	-1,090.60	1,204.78	644.55	580.28	64.27	10.028		
4,900.00	4,637.68	5,219.68	4,637.68	30.47	11.61	103.30	-1,090.15	1,219.74	557.48	493.17	64.30	8.670		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Company:	Berry Petroleum Company	Local Co-ordinate Reference:	Well LC Tribal 7-18D-56
Project:	Duchesne Co., UT (UT27C)	TVD Reference:	WELL @ 7207.00usft (Original Well Elev)
Reference Site:	Sec.18-T5S-R6W	MD Reference:	WELL @ 7207.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	LC Tribal 7-18D-56	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.1 Single User Db
Reference Design:	Design #1	Offset TVD Reference:	Reference Datum

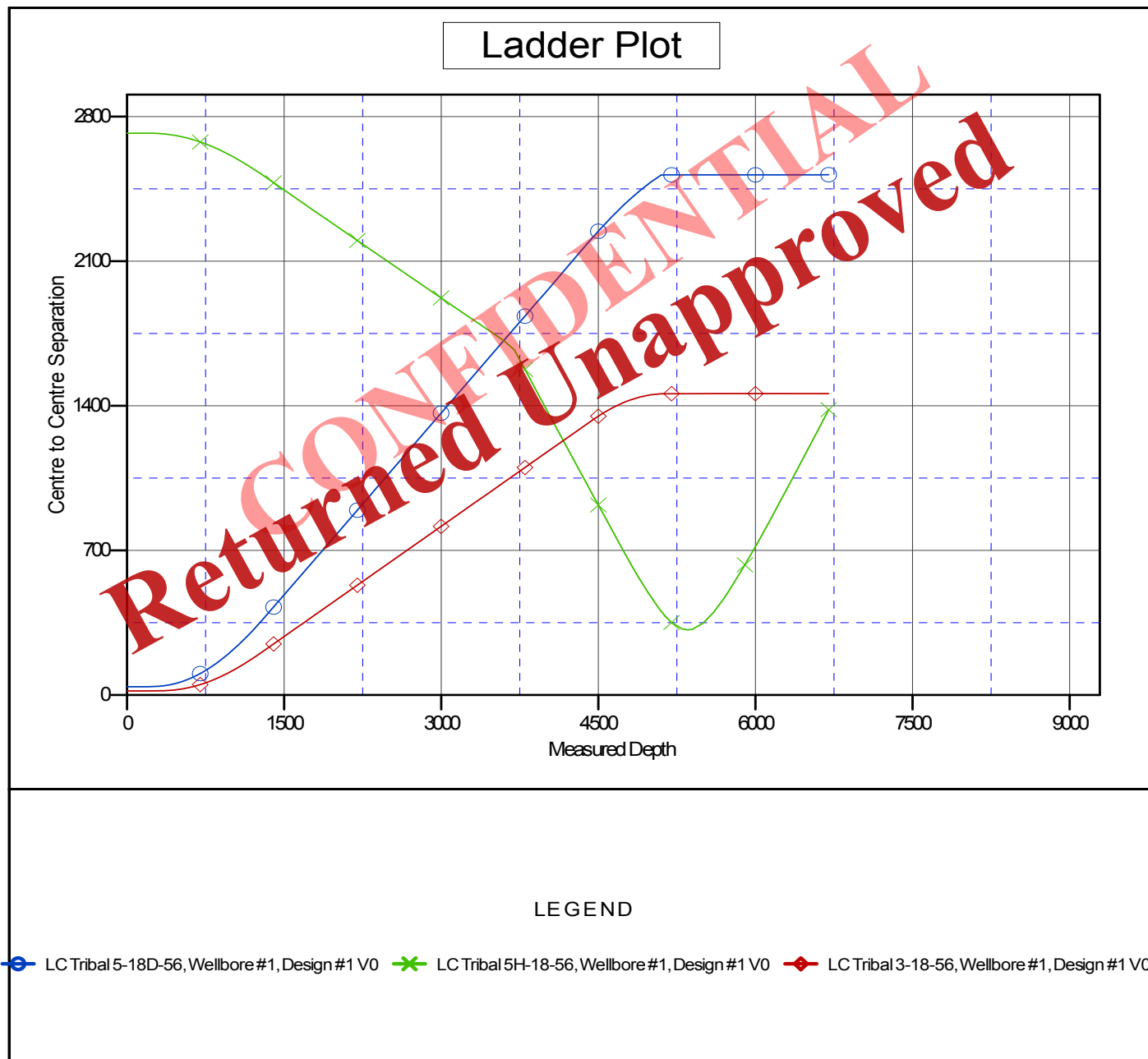
Offset Design												Offset Site Error:	0.00 usft
Survey Program: 0-MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,000.00	4,751.64	6,778.00	5,105.53	30.67	36.10	179.61	-1,089.84	1,230.41	476.39	412.70	63.70	7.479	
5,100.00	4,851.49	6,771.65	5,105.66	30.80	35.94	179.25	-1,089.65	1,236.76	405.54	342.52	63.02	6.435	
5,148.51	4,900.00	6,770.13	5,105.69	30.84	35.90	179.07	-1,089.60	1,238.27	376.76	313.99	62.77	6.002	
5,200.00	4,951.49	6,769.07	5,105.71	30.87	35.87	178.88	-1,089.57	1,239.34	351.31	288.57	62.74	5.600	
5,300.00	5,051.49	6,767.00	5,105.76	30.94	35.82	178.50	-1,089.51	1,241.41	320.26	257.58	62.66	5.109	
5,354.29	5,105.78	6,765.87	5,105.78	30.98	35.79	178.30	-1,089.48	1,242.53	315.63	252.98	62.65	5.038	CC, ES, SF
5,400.00	5,151.49	6,764.93	5,105.80	31.02	35.77	178.12	-1,089.45	1,243.47	318.92	256.29	62.63	5.091	
5,500.00	5,251.49	6,762.86	5,105.84	31.09	35.71	177.75	-1,089.39	1,245.54	347.62	285.05	62.57	5.256	
5,600.00	5,351.49	6,760.79	5,105.88	31.16	35.66	177.37	-1,089.33	1,247.61	399.96	337.44	62.51	5.398	
5,700.00	5,451.49	6,758.72	5,105.93	31.24	35.61	177.00	-1,089.26	1,249.68	468.06	405.60	62.44	7.494	
5,800.00	5,551.49	6,756.65	5,105.97	31.32	35.55	176.62	-1,089.20	1,251.75	546.07	483.65	62.40	8.751	
5,900.00	5,651.49	6,754.58	5,106.01	31.39	35.50	176.25	-1,089.14	1,253.82	630.31	567.96	62.35	10.109	
6,000.00	5,751.49	6,752.51	5,106.06	31.47	35.45	175.87	-1,089.08	1,255.88	718.55	656.90	62.29	11.536	
6,100.00	5,851.49	6,750.44	5,106.10	31.56	35.39	175.50	-1,089.02	1,257.95	809.61	747.37	62.24	13.008	
6,200.00	5,951.49	6,748.37	5,106.14	31.64	35.34	175.12	-1,088.96	1,259.92	900.52	840.33	62.18	14.514	
6,300.00	6,051.49	6,746.30	5,106.18	31.72	35.29	174.75	-1,088.90	1,262.00	996.80	934.67	62.13	16.044	
6,400.00	6,151.49	6,744.23	5,106.23	31.81	35.23	174.37	-1,088.83	1,264.16	1,092.09	1,030.01	62.08	17.593	
6,500.00	6,251.49	6,742.16	5,106.27	31.90	35.18	174.00	-1,088.77	1,266.23	1,188.15	1,126.13	62.02	19.157	
6,600.00	6,351.49	6,740.09	5,106.31	31.98	35.13	173.63	-1,088.71	1,268.29	1,284.81	1,222.84	61.97	20.733	
6,699.51	6,451.00	6,738.03	5,106.36	32.07	35.07	173.25	-1,088.65	1,270.35	1,381.47	1,319.56	61.92	22.312	



Company:	Berry Petroleum Company	Local Co-ordinate Reference:	Well LC Tribal 7-18D-56
Project:	Duchesne Co., UT (UT27C)	TVD Reference:	WELL @ 7207.00usft (Original Well Elev)
Reference Site:	Sec.18-T5S-R6W	MD Reference:	WELL @ 7207.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	LC Tribal 7-18D-56	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.1 Single User Db
Reference Design:	Design #1	Offset TVD Reference:	Reference Datum

Reference Depths are relative to WELL @ 7207.00usft (Original Well E
Offset Depths are relative to Offset Datum
Central Meridian is 111° 30' 0.000 W

Coordinates are relative to: LC Tribal 7-18D-56
Coordinate System is US State Plane 1927 (Exact solution), Utah Central 4302
Grid Convergence at Surface is: 0.57°





Company:	Berry Petroleum Company	Local Co-ordinate Reference:	Well LC Tribal 7-18D-56
Project:	Duchesne Co., UT (UT27C)	TVD Reference:	WELL @ 7207.00usft (Original Well Elev)
Reference Site:	Sec.18-T5S-R6W	MD Reference:	WELL @ 7207.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	LC Tribal 7-18D-56	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.1 Single User Db
Reference Design:	Design #1	Offset TVD Reference:	Reference Datum

Reference Depths are relative to WELL @ 7207.00usft (Original Well E

Offset Depths are relative to Offset Datum

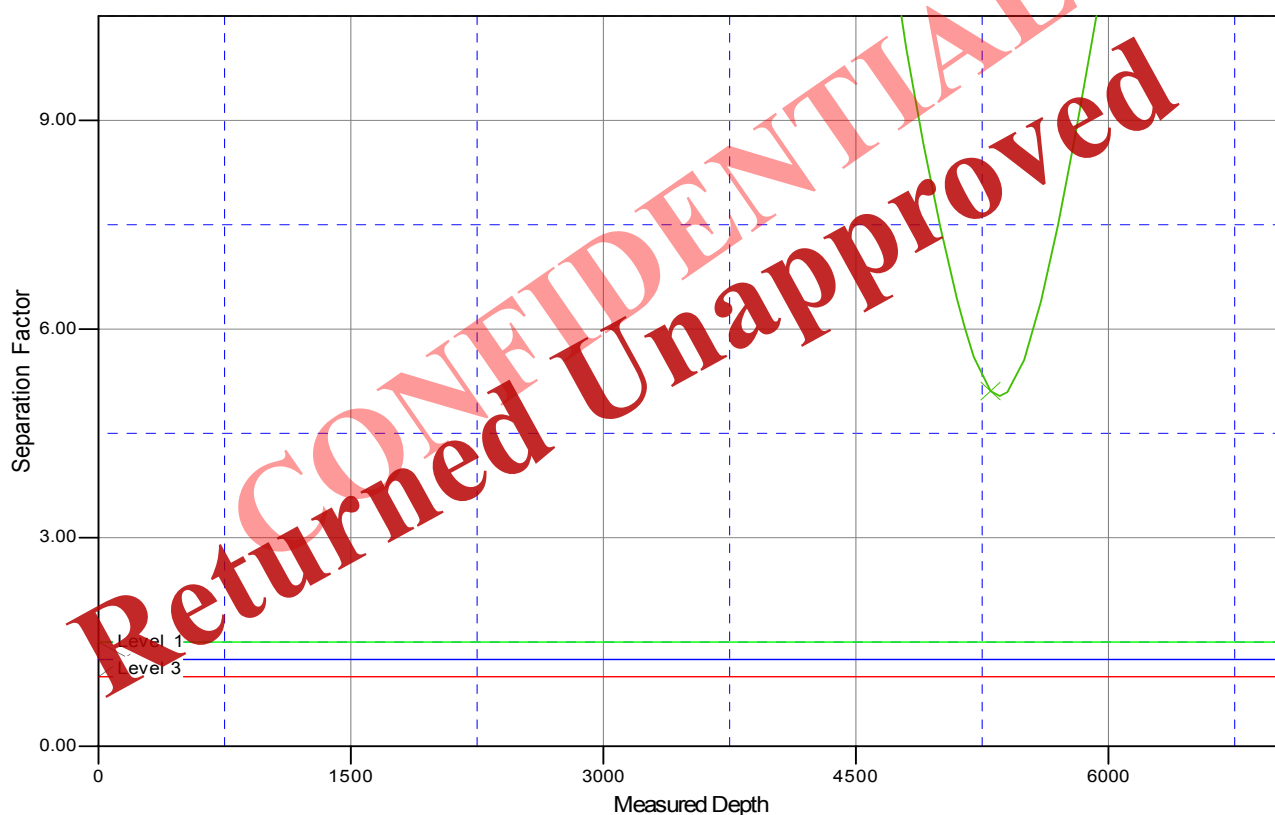
Central Meridian is 111° 30' 0.000 W

Coordinates are relative to: LC Tribal 7-18D-56

Coordinate System is US State Plane 1927 (Exact solution), Utah Central 4302

Grid Convergence at Surface is: 0.57°

Separation Factor Plot



LEGEND

LC Tribal 5-18D-56, Wellbore #1, Design #1 V0 LC Tribal 5H-18-56, Wellbore #1, Design #1 V0 LC Tribal 3-18-56, Wellbore #1, Design #1 V0

AFFIDAVIT OF SURFACE DAMAGE AGREEMENT

Jeff Crozier, the Affiant herein, is a Field Landman for Berry Petroleum Company, a Delaware corporation, with an office located at 4000 S 4028 W, Rt 2 Box 7735, Roosevelt, Utah 84066, being of lawful age and duly sworn upon his oath and being duly authorized to make this affidavit on behalf of said corporation hereby deposes and states to the best of his knowledge as follows:

That Berry Petroleum Company has a Surface Damage Agreement signed by the current surface owner covering the following described property, hereinafter referred to as the Land:

TOWNSHIP 5 SOUTH, RANGE 6 WEST, USB&M
Section 18 NE¼ NW ¼

Affiant further states said Surface Damage Agreement GRANTS, SELLS, and CONVEYS unto Berry Petroleum Company an easement for ingress and egress to, along with a right to use, that portion of the herein described property as may be necessary to construct, use, and maintain a well site or well sites (including location of additional wells on each well site in the case of directional or horizontal drilling) for the drilling, completion and operation of an oil and gas well or wells (including but not limited to pumping facilities and tank batteries) over, under and through the herein described Land.

Affiant further states said Surface Damage Agreement GRANTS, SELLS, and CONVEYS unto Berry Petroleum Company the right to construct, entrench, maintain, operate, replace, remove, protect, or abandon a pipeline or pipelines for water or gas with appurtenances thereto, including, but not limited to, valves, metering equipment, and cathodic equipment; to construct, maintain, relocate, or abandon a road (said well sites, pipelines, appurtenance, valves, metering equipment, cathodic equipment and road being sometimes collectively call the "facilities") over, under, and through the herein described Land.

Executed and effective as of this 22nd day of April, 2013.

Berry Petroleum Company

By: _____

Jeff Crozier
Field Landman

SURFACE USE PLAN of OPERATIONS

Attachment for Permit to Drill:

Name of Operator: Berry Petroleum Company
Address: 4000 South 4028 West/Rt. 2 Box 7735
Roosevelt, Utah 80466
Well Location: LC Tribal 7-18D-56
Surface: 855' FNL & 2025' FWL
Target: 1630' FNL & 1950' FEL
NE/4NW/4 of Sec. 18, T5S, R6W.

The surface owner or surface owner representative and dirt contractor will be proved with an approved copy of the surface use plan of operations and approved conditions of approval before initiating construction.

The onsite inspection for the referenced well will be conducted per UDOGM.

A Existing Roads

To reach the Berry Petroleum Company well, LC Tribal 7-18D-56, in Section 18-T5S-R6W:

The proposed well site is approximately 22 miles southwest of Duchesne, Utah.

Proceed in a westerly direction from Duchesne, Utah, along US Highway 40 for approximately 8.3 miles to the junction of this road and an existing road to the south. Turn left and proceed in a southerly, then westerly, then southerly direction for approximately 5.7 miles to the junction of this road and an existing road to the southeast. Turn left and proceed in a southeasterly, then southwesterly direction for approximately 6.0 miles to the junction of this road and an existing road to the southeast. Turn left and proceed in a southeasterly, then southwesterly direction for approximately 1.9 miles to the beginning of the proposed access to the northeast. Follow the road flags in a northeasterly direction for approximately 100 feet to the proposed LC Tribal 3-18-56, 5-18D-56 and 7-18D-56 location.

Berry Petroleum Company will improve or maintain existing roads in a condition the same or better than before operations began. Best Management Practices will be considered when improving or maintaining existing roads. In general this would involve the need for some surface material or fill to prevent or repair holes in the road due to heavy truck traffic during the drilling and completion operations. If repairs are made the operator will secure the appropriate material from private sources.

B New or Reconstructed Access Roads

See Topographic Map "A & B" for the location of the proposed access road. Berry Petroleum Company will construct a new access road, across DWR surface for approximately 100 feet (0.019 miles) to the proposed LC Tribal 3-18-56, 5-18D-56 and 7-18D-56 location.

C Location of Existing Wells

See Topographic Map "C" for the location of existing wells within a 1mile radius.

D Location of Tank Batteries, Production Facilities and Production Gathering and Service Lines

A containment dike will be constructed completely around those production facilities which contain fluids (i.e., production tanks, produced water tanks). This dike will be constructed of compacted subsoil, be impervious, hold 100% of the capacity of the largest tank. The site specific APD will address additional capacity if such is needed due to environmental concerns. The use of topsoil for the construction of dikes will not be allowed. If a Spill Prevention, Control, and Countermeasure (SPCC) Plan is required by the Environmental Protection Agency, the containment dike may be expanded with the Authorized Agency Officer's approval to meet SPCC requirements.

The proposed pipeline will tie in at an existing pipeline. Map "D" illustrating the proposed route is attached. The proposed pipeline will be 4"-6" polypipe and be placed above ground. The pipeline will run in the same corridor as the above proposed access road.

All site security guidelines identified in Federal regulation 43 CFR 3126.7, will be adhered to. All off-lease storage, off-lease measurement, or commingling on-lease or off-lease production will have prior written approval from the Authorized Agency Officer.

Gas meter runs will be located approximately 100 feet from the wellhead. Where necessary, the gas line will be anchored down from the wellhead to the meter.

E Location and Type of Water Supply

Water for the drilling and completion will be pumped or trucked from one of the following Berry source wells:

- Water Permit # 43-12400, Sec. 23, T5S, R5W
- Water Permit # 43-12400, Sec. 24, T5S, R5W
- Water Permit # 43-1221, Sec. 30, T3S, R8W
- Water Permit # 43-1226, Sec. 30, T3S, R8W
- Water Permit # 43-1627, Sec. 30, T3S, R8W
- Water Permit # 43-1628, Sec. 12, T5S, R6W (Douglas E. & Yordis Nielsen)
- Duchesne City Culinary Water Dock located in Sec. 1, T4S, R5W
- East Duchesne Water, Arcadia Feedlot, Sec. 28, T3S, R3W
- Petroglyph Operating Company 08-04 Waterplant, Sec. 8, T5S, R3W.

F Source of Construction Materials

All construction materials for this location site and access road shall be borrow material accumulated during the construction of the location site and access road.

Additional gravel or pit lining material will be obtained from a private source.

The use of materials under Authorized Agency jurisdiction will conform to 43 CFR 3610.2-3.

G Methods of Handling Waste Materials

Drill fluids will be contained in a closed loop system. Cuttings will be contained on site and buried in a pit or used on location and/or access roads, whichever is deemed appropriate by the authorized agency.

After first production, produced wastewater from Berry Petroleum Company wells will be used for injection in our enhanced oil recovery project(s) in the Brundage Canyon Field or they will be trucked to one of the following approved waste water disposal sites:

- R.N. Industries, Inc. Sec. 4, T2S, R2W, Bluebell
- MC & MC Disposal Sec. 12, T6S, R19E, Vernal
- LaPoint Recycle & Storage Sec. 12, T5S, R19E, LaPoint
- Water Disposal Inc. Sec. 32, T1S, R1W, Roosevelt
- ITL 4461 W 3000 So Roosevelt Location Pleasant Valley
- IWM PO Box 430 Altamont or 20250 W 2000 S Duchesne Location – Blue Bench
- Pro Water 12223 Highland Ave Ste B503 Rancho Cucamonga CA 91739 Location – Blue Bench

Should operations of the field be prohibited by the Authorized Officer, the wastewater shall be confined to the approved pit or storage tank for a period not to exceed 90 days. The use of such pit is hereby approved as part of this Application for Permit to Drill.

Production fluids will be contained in leak-proof tanks. All production fluids will be disposed of at approved disposal sites. Produced water, oil, and other byproducts will not be applied to roads or well pads for control of dust or weeds. The indiscriminate dumping of produced fluids on roads, well sites, or other areas will not be allowed.

Any spills of oil, gas, salt water, or other noxious fluids will be immediately cleaned up and removed to an approved disposal site.

A chemical portable toilet will be furnished with the drilling rig.

Garbage, trash, and other waste materials will be collected in a portable, self-contained, fully enclosed trash cage during operations. Trash will not be burned on location.

All debris and other waste materials not contained in the trash cage will be cleaned up and removed from the location promptly after removal of the completion rig (weather permitting).

Any open pits will be fenced during the operations. The fencing will be maintained with best efforts until such time as the pits are backfilled.

No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completing of wells. Furthermore, extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will not be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completing of wells within these areas.

H Ancillary Facilities

There are no ancillary facilities planned for at this time and none are foreseen in the future.

I Well site Layout

The attached Location Layout diagram describes drill pad cross-sections, cuts and fills, and locations of the mud tanks, reserve pit, pipe racks, trailer parking, spoil dirt stockpile(s) and surface material stockpile(s)

J Plans for Restoration of the Surface

Interim

The dirt contractor will be provided with approved copies of the Surface Use Plan prior to construction activities.

Upon well completion, within a reasonable time, the location and surrounding area will be cleared of all unused tubing, materials, trash, and debris not required for production.

Abandoned well sites, roads, and other disturbed areas will be restored as near as practical to their original condition. Where applicable, these conditions may include the re-establishment of irrigation systems, the re-establishment of appropriate soil conditions, and the re-establishment of vegetation as specified.

All disturbed areas will be re-contoured to the approximate natural contours.

Any drainage rerouted during the construction activities shall be restored to its original line of flow or as near as possible.

All areas of disturbance (including surface pipelines) must have appropriate surface use agreements or approvals in place with the proper owner and/or agency before such action is started.

The conditions of approval, as set forth by those owners and/or agencies, shall be adhered to.

Interim Reclamation consisting of minimizing the footprint of disturbance shall be accomplished by reclaiming all portions of the well site not needed for safe production operations. The portions of the well site not needed for operational and safety purposes will be recontoured to a final appearance that blends with the surrounding topography. Topsoil will be spread over these areas. The operator will spread the topsoil over the entire location except where an all-weather surface, access route or turnaround is needed. Production facilities should be clustered or placed offsite to maximize the opportunity for interim reclamation. Any incidental use on interim reclamation may require restoration of damage. This may require recontouring and seeding of the damaged area.

Paint all production facilities and equipment, not otherwise regulated (OSHA, etc.), Yuma Green.

Install Hospital muffler to the Pumpjack to minimize engine noise.

Final

Prior to the construction of the location, the top 12 inches of soil material (if present) will be stripped and stockpiled. Placement of the topsoil is noted on the location plat attached. Topsoil shall be stockpiled separately from subsoil materials. Topsoil salvaged from the reserve pit shall be stockpiled separately near the reserve pit.

When restoration activities have been completed, the location site and new access road cuts and shoulders shall be reseeded. Prior to reseeding, all disturbed areas, including the old access road will be scarified and left with a rough surface.

The Authorized Agency Officer shall be contacted for the required seed mixture. Seed will be broadcast and the amount of seed mixture per acre will be doubled. The seeded area will then be "walked" with a dozer to assure coverage of the seeds. The seed mixture will reflect the recommendation from the Archeology study done.

At final abandonment, all casing shall be cut off at the base of the cellar or 3 feet below final restored ground level, whichever is deeper, and cap the casing with a metal plate a minimum of 0.25 inches thick. The cap will be welded in place and the well location and identity will be permanently inscribed on the cap. The cap also will be constructed with a weep hole.

K Well Surface & Access Ownership:

Utah Division of Wildlife Resources
Local Contact: Ben Williams (435) 823-0946

L Other information

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

Berry will control noxious weeds along access road use authorizations, pipeline route authorizations, well sites or other applicable facilities. A list of noxious weeds may be obtained from the Authorized Agency or the appropriate County Extension Office.

Drilling rigs and/or equipment used during drilling operations on this location will not be stacked or stored on administered lands after the conclusion of drilling operations or at any other time without authorization by the Authorized Agency Officer. If authorization is obtained, such storage is only a temporary measure.

Travel is restricted to approved routes only.

AIA Archaeology has conducted a Class III archaeological survey. A copy of this report has been submitted under separate cover by AIA Archaeology to the appropriate agencies.

All personnel will refrain from collecting artifacts and from disturbing any significant cultural resources in the area. The operator is responsible for informing all persons in the area who are associated with this project that they may be subject to prosecution for knowingly disturbing historic or archaeological sites or for collecting artifacts. All vehicular traffic, personnel movement, construction, and restoration activities shall be confined to the areas examined, as referenced in the archaeological report, and to the existing roadways and/or evaluated access routes. If historic or archaeological materials are uncovered during construction, Berry Petroleum Company is to immediately stop work that might further disturb such materials and contact the Authorized Agency Officer.

Within five working days, the Authorized Agency Officer will inform the operator as to:

- Whether the materials appear eligible for the National Historic Register of Historic Places;
- The mitigation measures Berry will likely have to undertake before the site can be used (assuming in-situ preservation is not necessary); and a time frame for the Authorized Officer to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the Authorized Officer are correct and that the mitigation measures are appropriate.

If Berry wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the Authorized Agency Officer and/or the surface owner will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise the operator will be responsible for mitigation costs. The Authorized Agency Officer and/or the surface owner will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the Authorized Agency Officer that required mitigation has been completed, Berry will then be allowed to resume construction.

All Surface Use Conditions of Approval associated with the Landowner Surface Use Agreement and Environmental Analysis Mitigation Stipulations will be adhered to.

All well site locations will have appropriate signs indicating the name of the operator, the lease serial number, the well name and number, the survey description of the well (footages or the quarter/quarter section, the section, township, and range).

M. Annual Air Emissions

Table 4-1. Proposed Action Annual Emissions
(tons/year)¹

Pollutant	Development	Production	Total
NO _x	5.7	8.1	13.8
CO	3.9	7.5	11.4
VOC	1.5	59.7	60.6
SO ₂	0.009	0.42	0.429
PM ₁₀	2.7	0.78	3.48
PM _{2.5}	0.9	0.78	1.68
Benzene	0.03	0.3	0.33
Toluene	0.012	0.606	0.618
Ethylbenzene	0.003	0.582	0.585
Xylene	0.009	0.981	0.99
n-Hexane	0	3.21	3.21
Formaldehyde	0.09	0.489	0.579

¹ Emissions include 3 producing well and associated operations traffic during the year in which the project is developed.

BERRY PETROLEUM COMPANY
LC TRIBAL #3-18-56, #5-18D-56 & #7-18D-56
SECTION 18, T5S, R6W, U.S.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM DUCHESNE, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 8.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTH; TURN LEFT AND PROCEED IN A SOUTHERLY, THEN WESTERLY, THEN SOUTHERLY DIRECTION APPROXIMATELY 5.7 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN LEFT AND PROCEED IN A SOUTHEASTERLY, THEN SOUTHWESTERLY DIRECTION APPROXIMATELY 6.0 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN LEFT AND PROCEED IN A SOUTHEASTERLY, THEN SOUTHWESTERLY DIRECTION APPROXIMATELY 1.9 MILES TO THE BEGINNING OF THE PROPOSED ACCESS TO THE NORTHEAST; FOLLOW ROAD FLAGS IN A NORTHEASTERLY DIRECTION APPROXIMATELY 100' TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM DUCHESNE, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 21.9 MILES.

Returned Unapproved

BERRY PETROLEUM COMPANY

LOCATION LAYOUT FOR

LC TRIBAL #3-18-56, #5-18D-56 & #7-18D-56
SECTION 18, T5S, R6W, U.S.B.&M.
NE 1/4 NW 1/4

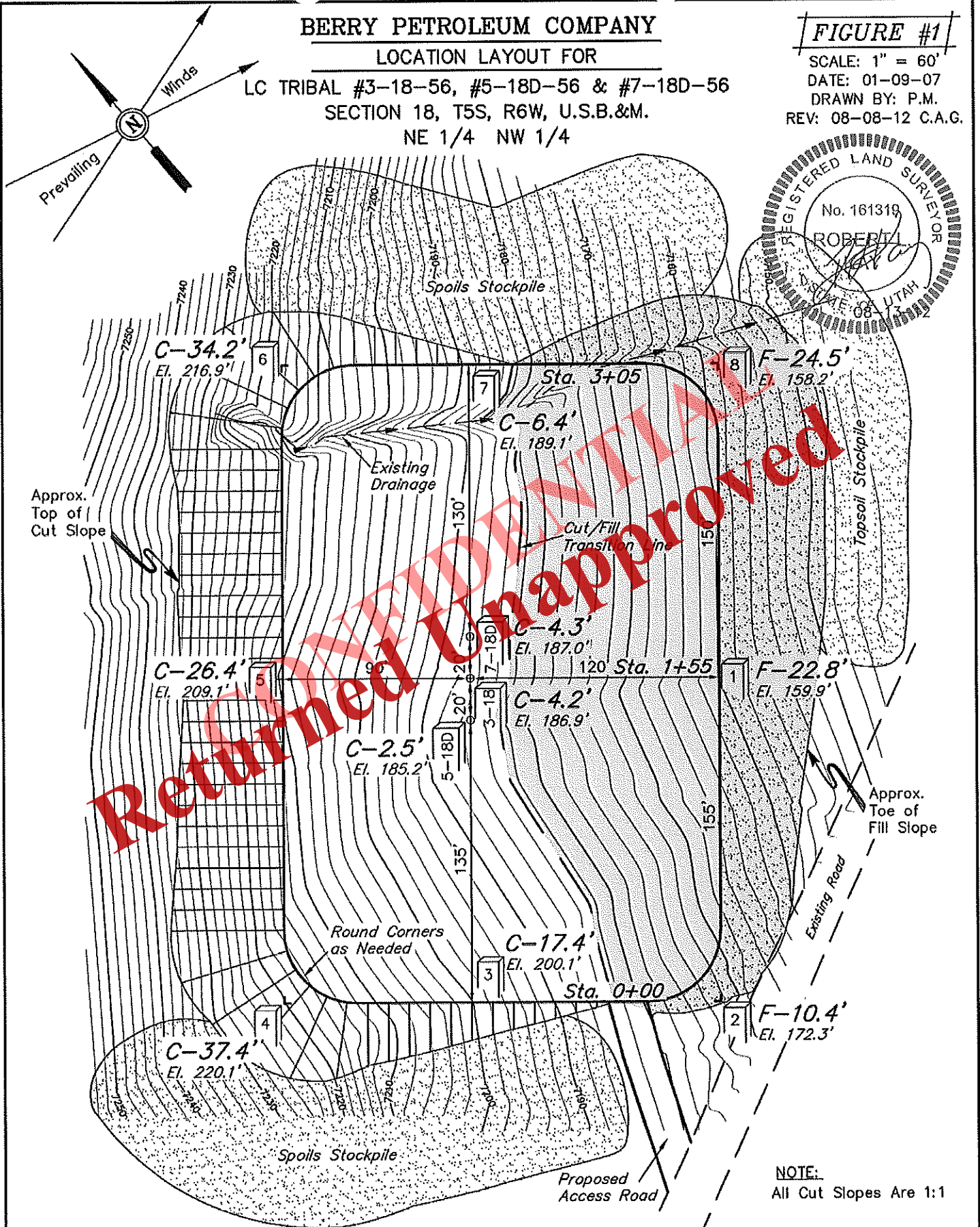
FIGURE #1

SCALE: 1" = 60'

DATE: 01-09-07

DRAWN BY: P.M.

REV: 08-08-12 C.A.G.



Elev. Ungraded Ground At #3-18 Loc. Stake = 7186.9'
FINISHED GRADE ELEV. AT #3-18 LOC. STAKE = 7182.7'

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017

NOTE:
All Cut Slopes Are 1:1

Received: April 30, 2013

BERRY PETROLEUM COMPANY

TYPICAL CROSS SECTIONS FOR

LC TRIBAL #3-18-56, #5-18D-56 & #7-18D-56
SECTION 18, T5S, R6W, U.S.B.&M.
NE 1/4 NW 1/4

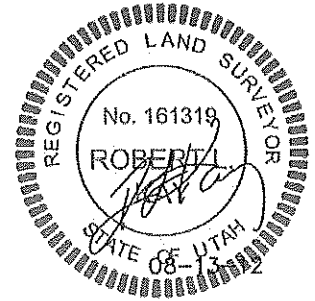
FIGURE #2

DATE: 01-09-07

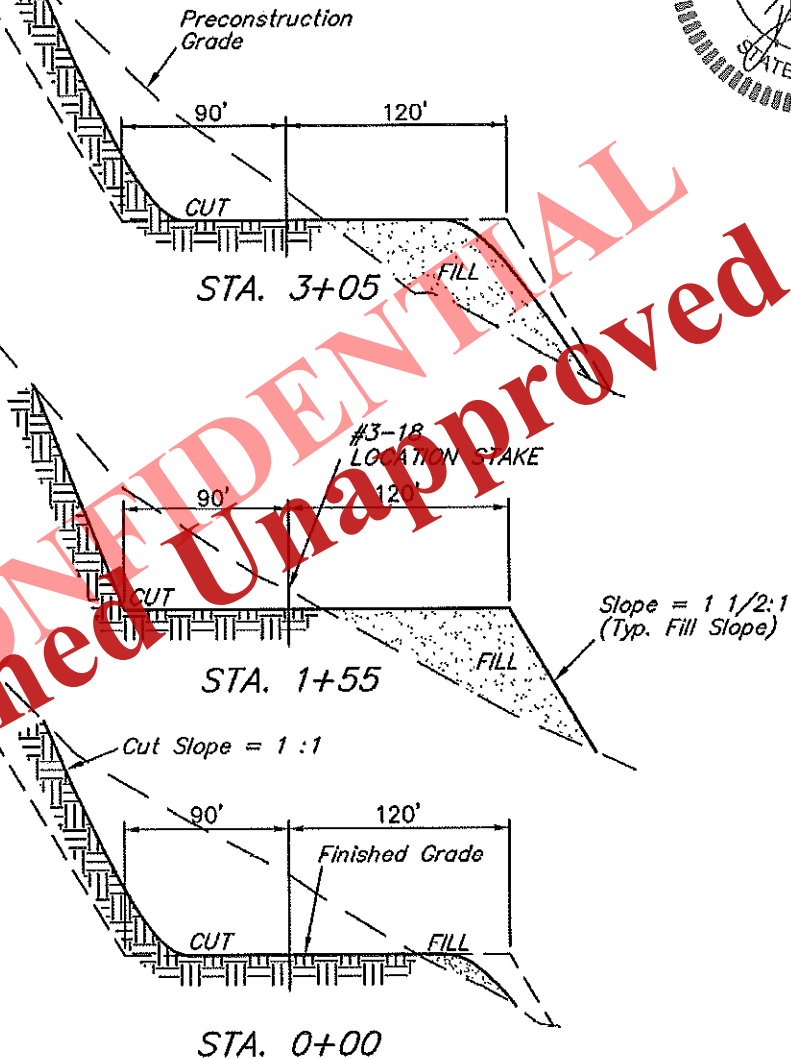
DRAWN BY: P.M.

REV: 08-08-12 C.A.G.

1" = 40'
X-Section
Scale
1" = 100'



Returned Unapproved



NOTE:

Topsoil should not be Stripped Below Finished Grade on Substructure Area.

APPROXIMATE ACREAGES

WELL SITE DISTURBANCE = ± 2.119 ACRES
ROAD & PIPELINE
CORRIDOR DISTURBANCE = ± 3.918 ACRES
TOTAL = ± 6.037 ACRES

* NOTE:
FILL QUANTITY INCLUDES
5% FOR COMPACTION

APPROXIMATE YARDAGES

(6") Topsoil Stripping = 2,130 Cu. Yds.
Remaining Location = 29,700 Cu. Yds.
TOTAL CUT = 31,830 CU.YDS.
FILL = 17,970 CU.YDS.

EXCESS MATERIAL = 13,860 Cu. Yds.
Topsoil = 2,130 Cu. Yds.
EXCESS UNBALANCE = 11,730 Cu. Yds.
(After Interim Rehabilitation)

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017

Received: April 30, 2013

BERRY PETROLEUM COMPANY

TYPICAL RIG LAYOUT FOR

LC TRIBAL #3-18-56, #5-18D-56 & #7-18D-56
SECTION 18, T5S, R6W, U.S.B.&M.
NE 1/4 NW 1/4

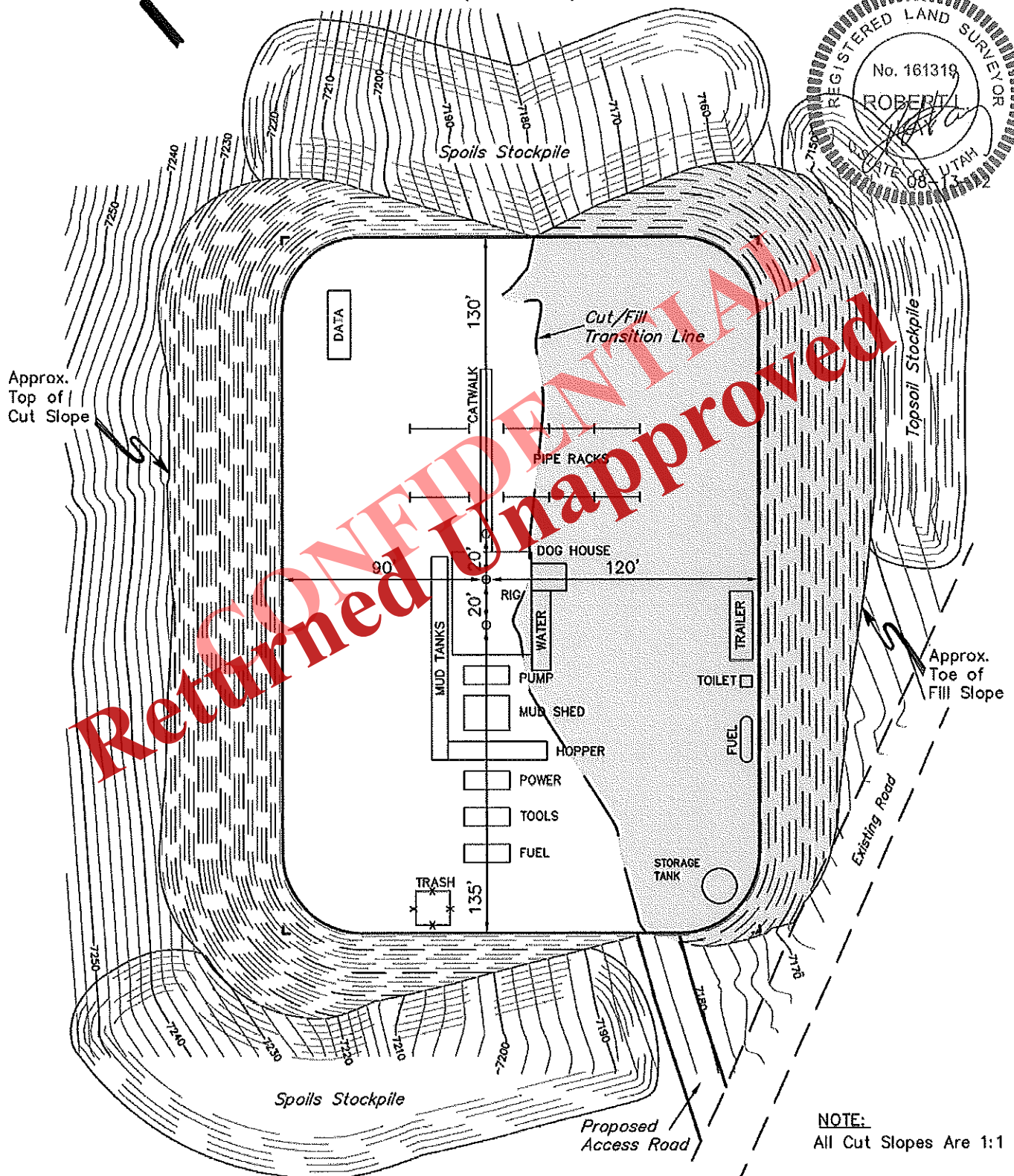
FIGURE #3

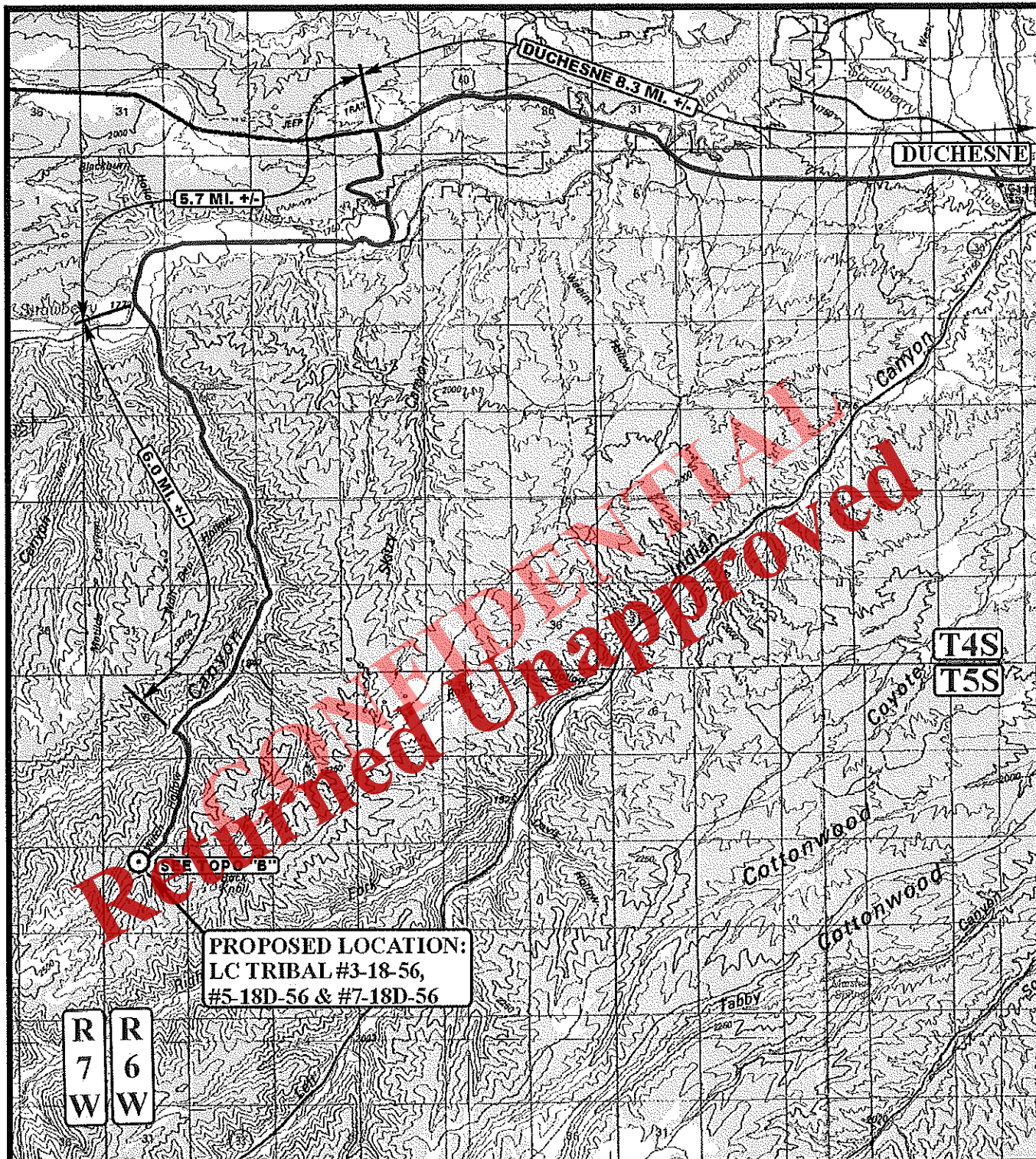
SCALE: 1" = 60'

DATE: 01-09-07

DRAWN BY: P.M.

REV: 08-08-12 C.A.G.





LEGEND:

○ PROPOSED LOCATION

N

BERRY PETROLEUM COMPANY

LC TRIBAL #3-18-56, #5-18D-56 & #7-18D-56
SECTION 18, T5S, R6W, U.S.B.&M
NE 1/4 NW 1/4



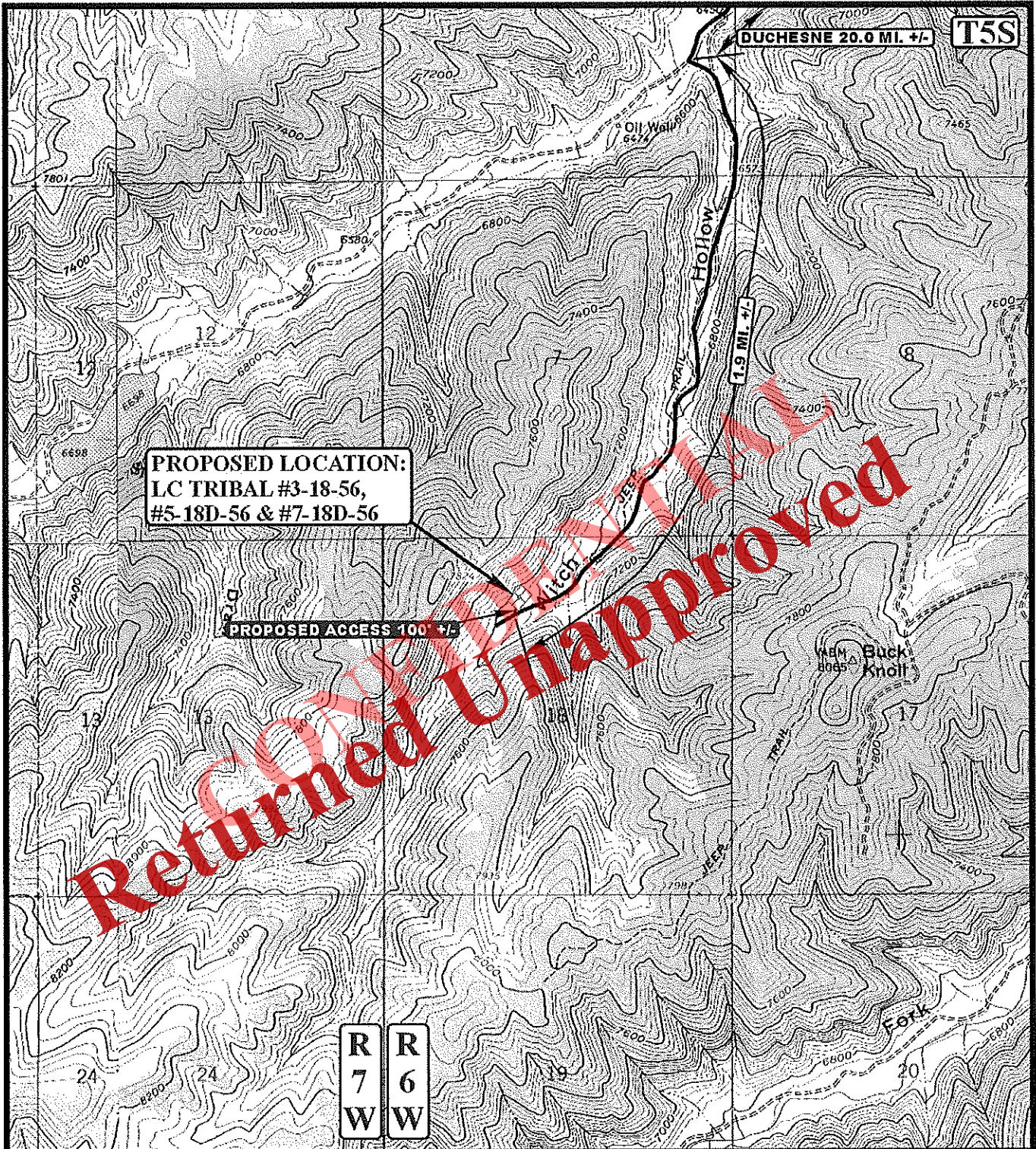
Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC
MAP

1 5 07
MONTH DAY YEAR



SCALE: 1:100,000 | DRAWN BY: J.L.G. | REV: 08-09-12 C.I.



LEGEND:

EXISTING ROAD
PROPOSED ACCESS ROAD

N

BERRY PETROLEUM COMPANY

LC TRIBAL #3-18-56, #5-18D-56 & #7-18D-56
SECTION 18, T5S, R6W, U.S.B.&M
NE 1/4 NW 1/4



Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC
MAP

1 5 07
MONTH DAY YEAR



SCALE: 1" = 2000' DRAWN BY: J.L.G. REV: 08-09-12 C.I.

T5S

PROPOSED LOCATION:
LC TRIBAL #3-18-56,
#5-18D-56 & #7-18D-56

Returned Unapproved

R R
7 6
W W

LEGEND:

- | | |
|-------------------|-------------------------|
| ○ DISPOSAL WELLS | ○ WATER WELLS |
| ● PRODUCING WELLS | ● ABANDONED WELLS |
| ● SHUT IN WELLS | ● TEMPORARILY ABANDONED |

N

BERRY PETROLEUM COMPANY

LC TRIBAL #3-18-56, #5-18D-56 & #7-18D-56
SECTION 18, T5S, R6W, U.S.B.&M
NE 1/4 NW 1/4



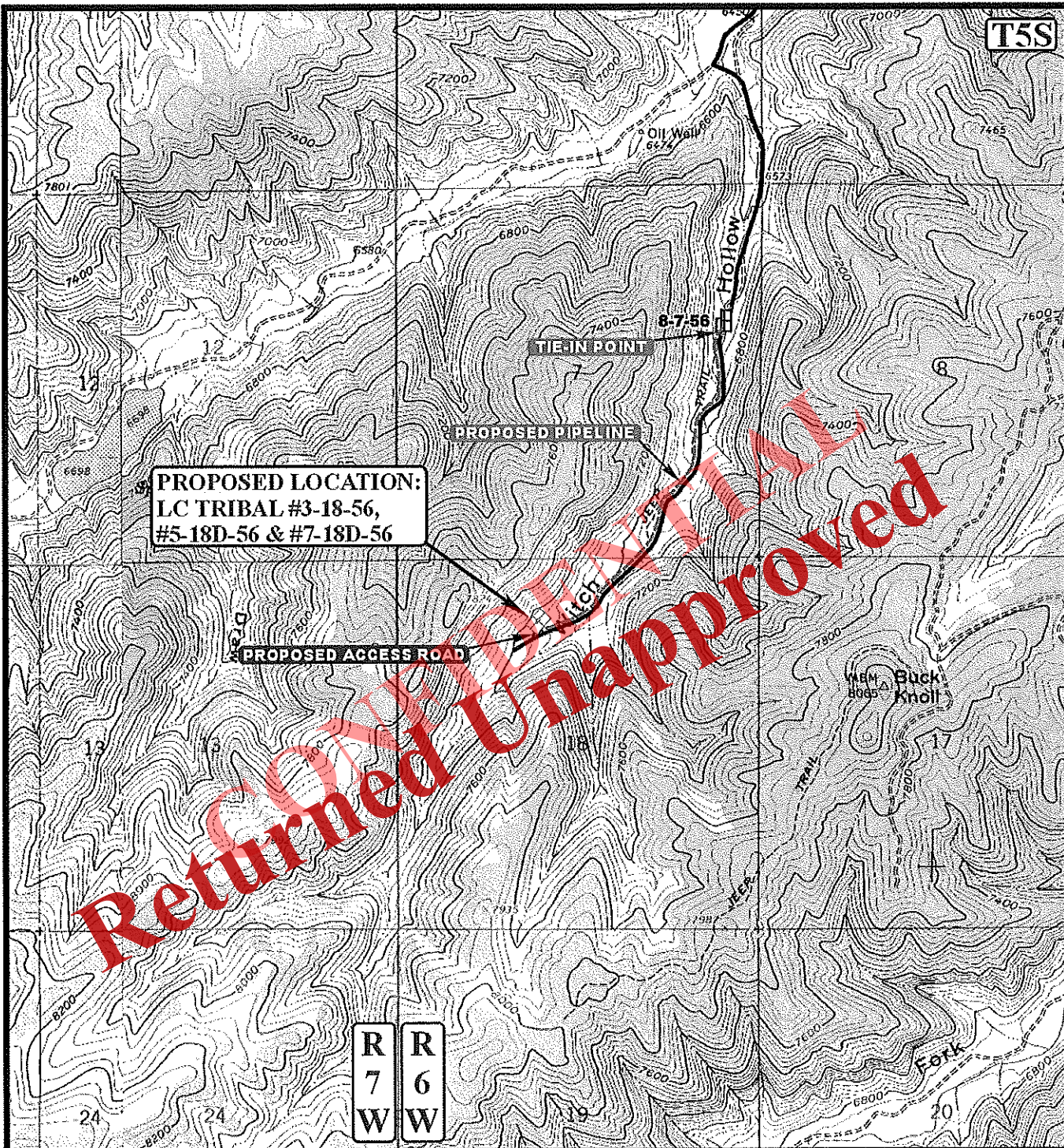
Utah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC
MAP

1 5 07
MONTH DAY YEAR



SCALE: 1" = 2000' DRAWN BY: J.L.G. REV: 08-09-12 C.I.



APPROXIMATE TOTAL PIPELINE DISTANCE = 5,719' +/-

LEGEND:

- EXISTING PIPELINE
- - - PROPOSED PIPELINE
- PROPOSED ACCESS

BERRY PETROLEUM COMPANY

LC TRIBAL #3-18-56, #5-18D-56 & #7-18D-56
SECTION 18, T5S, R6W, U.S.B.&M
NE 1/4 NW 1/4



Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813



TOPOGRAPHIC
MAP

1 5 07
MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: J.L.G. REV: 08-09-12 C.I.



BERRY PETROLEUM COMPANY
LC TRIBAL #3-18-56, #5-18D-56 & #7-18D-56
LOCATED IN DUCHESNE COUNTY, UTAH
SECTION 18, T5S, R6W, U.S.B.&M.



PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: EASTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: NORTHERLY



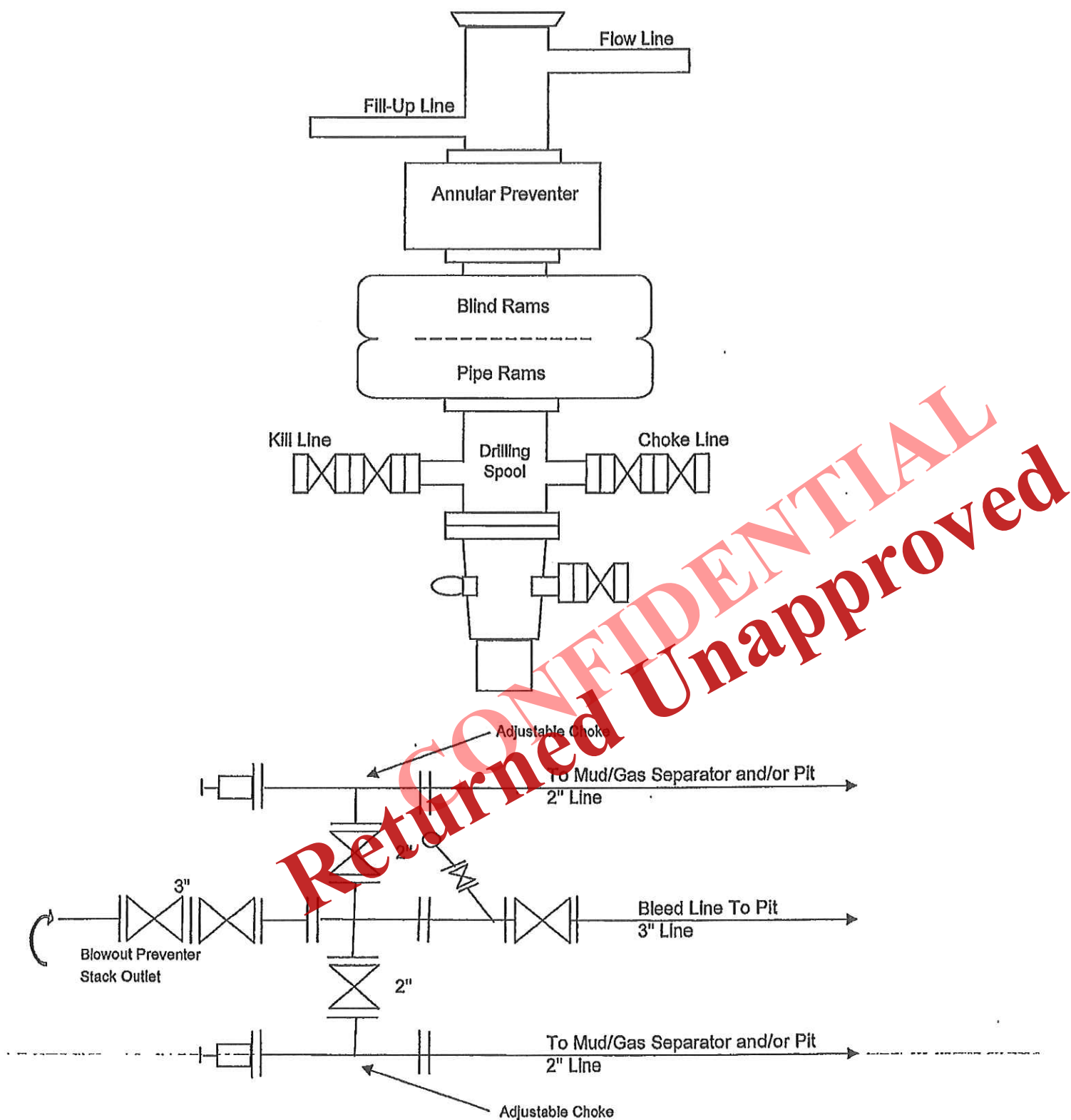
UELS

Uintah Engineering & Land Surveying
 85 South 200 East Vernal, Utah 84078
 435-789-1017 uels@uelsinc.com

LOCATION PHOTOS	1	5	07	PHOTO
	MONTH	DAY	YEAR	
TAKEN BY: C.A.	DRAWN BY: J.L.G.		REV: 08-09-12 C.I.	

Received: April 30, 2013

SCHEMATIC DIAGRAM OF 3,000 PSI BOP STACK



AFFIDAVIT OF NOTICE

I, **Kathy Fieldsted**, the affiant herein, being of lawful age and duly sworn upon his oath deposes and states to the best of my knowledge as follows:

Kathy Fieldsted is a Sr. Regulatory & Permitting Tech. for **Berry Petroleum Company**, a Delaware Corporation, with headquarters located at 1999 Broadway, Suite 3700, Denver, Colorado 80202, and is duly authorized to make this affidavit on behalf of said corporation. This Affidavit is made in accordance with Utah's Oil, Gas and Mining regulation R649-3-22.

Berry Petroleum Company has submitted notices to commingle production from the Wasatch and Green River formations in the following wells:

LC Tribal 9-4D-56
LC Tribal 7-17D-56
LC Tribal 9-17D-56
LC Tribal 5-17D-56
LC Tribal 3-18-56
LC Tribal 5-18D-56
LC Tribal 7-18D-56

Per the terms of the Ute Tribal Lake Canyon Exploration and Development Agreement BIA Lease # 14-20-H62-5500, Berry Petroleum Company is the owner of contiguous oil and gas leases or drilling units or has the right to the minerals overlying the pool for the aforementioned wells. Notice of intent to commingle production is hereby waived.

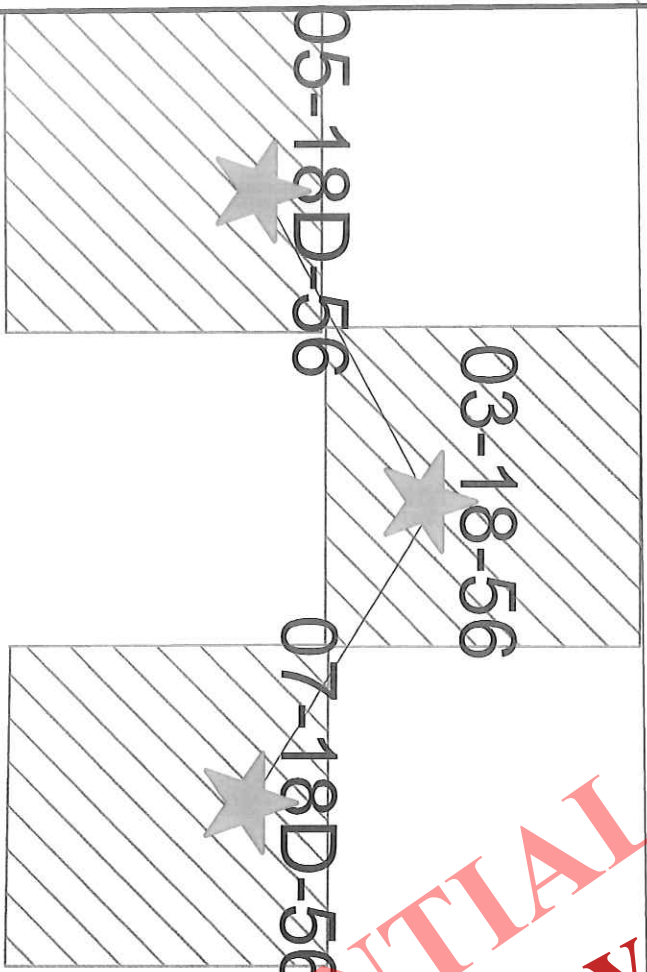
This instrument is executed this 2nd day of November, 2012.

Berry Petroleum Company

By: 

Received: April 23, 2013

CONFIDENTIAL
Returned Unapproved



★ Well of Interest
■ Berry Ute Tribal Leases
■ Berry Fee Leases
■ Drilling Units to Commingle

Berry Petroleum Company

Statewide Utah

Commingle Map



November 1, 2012



Berry Petroleum Company

Rt 2 Box 7735
4000 S. 4028 W
Roosevelt, Utah 84066
Phone (435) 722-1325
Fax (435) 722-1321

April 22, 2013

Ms. Diana Whitney
State of Utah
Division of Oil, Gas and Mining
P.O. Box 145801
Salt Lake City, UT 84115-5801

Re: Directional Drilling R649-3-11
LC TRIBAL 7-18D-56 855' FNL & 2025' FWL (NENW – SHL)
1630' FNL & 1950' FEL (SWNE – BHL)
Section 18, T5S-R6W
Duchesne, County, Utah

Dear Ms. Whitney:

Pursuant to the filing of Berry Petroleum's Application for Permit to Drill regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the Exception to Location and Siting of Wells.

- The LC TRIBAL 7-18D-56 well is to be located within the Lake Canyon Field Area.
- Berry is locating the well at the surface location and directionally drilling from this location to minimize surface disturbance and Berry will be able to utilize the existing road and pipelines in the area.
- Furthermore, Berry hereby certifies that it is the sole working interest owner with 460 feet of the entire directional well bore and the remainder of the Ute Tribal section.

Therefore, based on the above stated information Berry Petroleum Company requests the permit be granted pursuant to R649-3-11.

Respectfully Submitted,

Krista Mecham

Krista Mecham
Sr. Regulatory & Permitting Technician

Received: April 23, 2013

SELF-CERTIFICATION STATEMENT

The following self-certification statement is provided per federal requirements dated May 7, 2007.

Please be advised that Berry Petroleum Company is considered to be the operator of the following well.

LC Tribal 7-18D-56
Section 18, T5S, R6W, U.S.B. & M.
SHL: 855' FNL & 2025' FWL (NE/4NW/4)
BHL: 1630' FNL & 1950' FEL (SW/4NE/4)
Duchesne, County, Utah

Berry Petroleum Company is responsible under the terms of the lease for the operations conducted upon the lease lands.

Operator's Representative and Certification

A) Representative

NAME: Krista M. Mecham

ADDRESS: Berry Petroleum Company
4000 South 4028 West
Route 2, Box 7735
Roosevelt, Utah 84066

PHONE: 435-722-1325

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations and onshore oil and gas orders. Berry Petroleum Company is fully responsible for the actions of its subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

The drilling permit will be valid for a period of two years from the date of approval. After permit termination, a new application will be filed for approval for any future operations.

B) Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge and belief, true and correct; and that the work associated with the operations proposed herein will be performed by Berry Petroleum Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

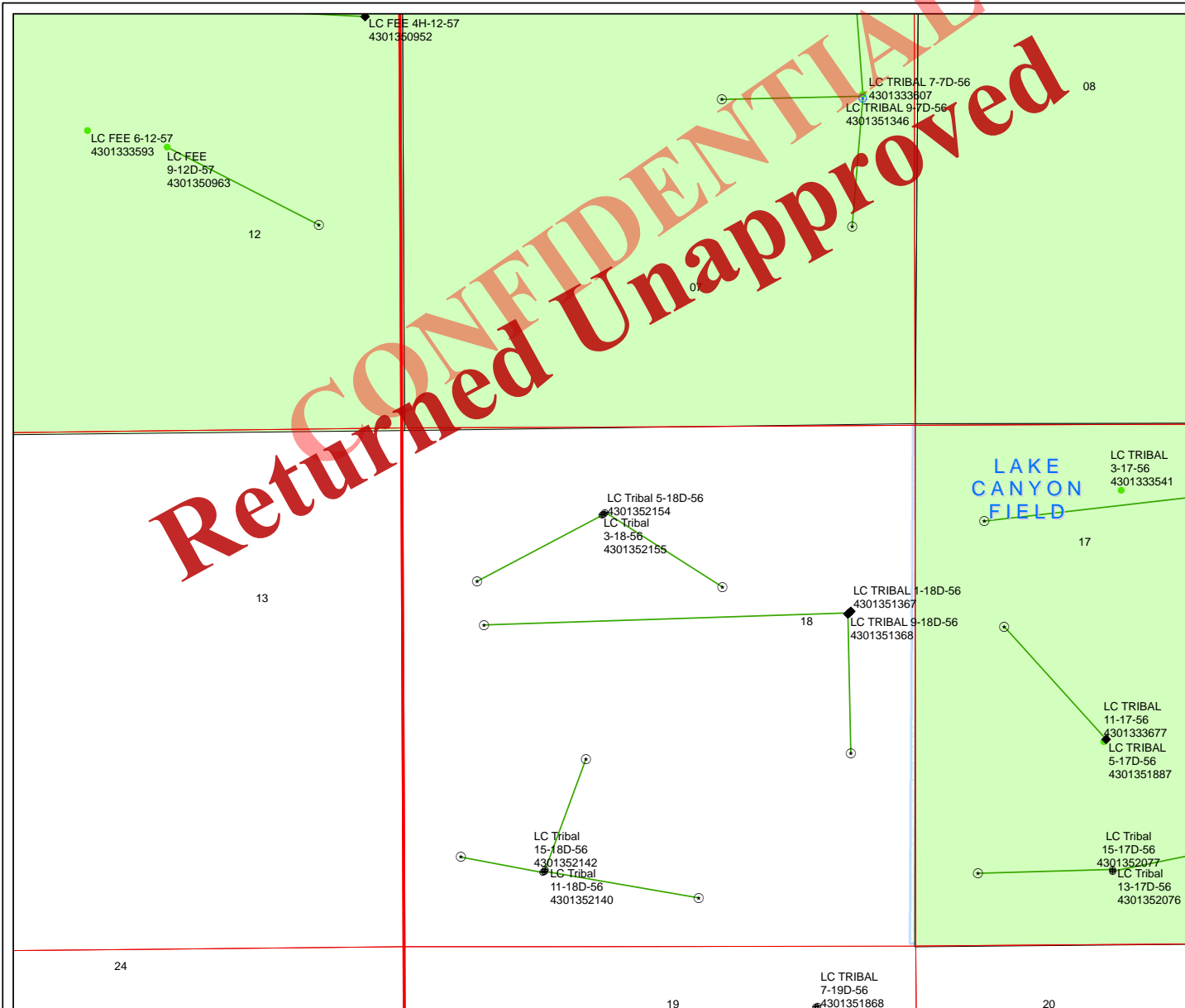
4/23/13

DATE

Krista Mecham

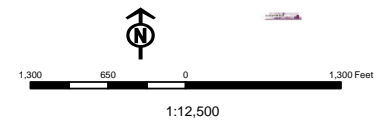
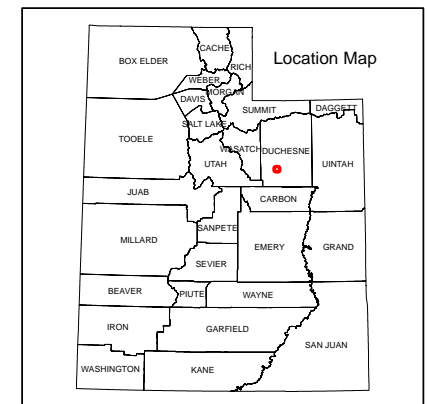
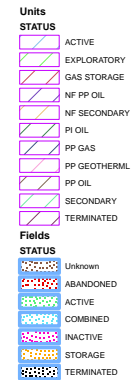
Krista M. Mecham
Sr. Regulatory & Permitting Tech.

CONFIDENTIAL
Returned Unapproved



API Number: 4301352153
Well Name: LC Tribal 7-18D-56
Township T05.0S Range R06.0W Section 18
Meridian: UBM
Operator: BERRY PETROLEUM COMPANY

Map Prepared:
Map Produced by Diana Mason



Received: April 30, 2013



GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

April 23, 2015

LINN OPERATING, INC.
Rt. 2 Box 7735
Roosevelt, UT 84066

Re: Application for Permit to Drill - DUCHESNE County, Utah

Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the LC Tribal 7-18D-56 well, API 43013521530000 that was submitted April 23, 2013 is being returned unapproved. If you plan on drilling this well in the future, you must first submit a new application.

Should you have any questions regarding this matter, please call me at (801) 538-5312.

Sincerely,

Diana Mason
Environmental Scientist

Enclosure

cc: Bureau of Land Management, Vernal, Utah



